

California State Journal of Medicine.

Published Monthly by the
Medical Society of the State of California

Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postoffice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, 31 Post Street, San Francisco.

Subscription price to non-members of California affiliated county medical societies, \$3.00 per year, in advance; single copies, 25 cents. Subscriptions may be sent to publication office, 31 Post St., San Francisco, or to the San Francisco News Co., 342 Geary St., or any of its agents.

OCTOBER, 1903.

EDITORIAL NOTES.

The *New York Medical Journal*, in commenting editorially on the address in surgery of the British Medical Association, delivered **SURGICAL** by Mr. A. W. Mayo Robson, is pained **ENGLISH** that certain flaws in the diction should have been permitted to creep in. "In St. Thomas's there was 1 ovariectomy, which died, and there were 14 herniotomies, of which 8 died." "Up to 1883 every case of intraperitoneal rupture of the bladder had died, but in that year Sir William MacCormac operated on and saved two lives." This is the same old thing that some of us have been fighting against for years. Beyond question, a case cannot die, nor can an operation meet with the same fate; it is equally absurd to speak of a life being operated upon. Yet these and worse errors are becoming so common that they almost cease to attract notice. This very journal, in the same issue, contains papers in which the misuse of "case," where patient is intended, occurs. There will soon have to be a recognized brand of English, probably called "Surgical English", in which the ordinary conventions of the language will be disregarded, men may talk of "operating this case", or "seeing this case in consultation", and commit the other abominations which seem to be borrowed from German syntax and may possibly be used as indicative of a more or less limited acquaintance with that country or its language.

The *Kentucky State Medical Association Bulletin* has been established as the official publication of the Association, and has **READING** reached its third issue. We are **NOTICES** certainly glad to see another addition to the number of state association journals, for in time these publications will prob-

ably do away with a large number of the cheap and vile so-called "medical journals" that have come up all over the country and thrive on discreditable advertising. Many of these "journals" are owned, body and soul, by one or more nostrum manufacturers, and they are used to aid in debauching the minds of a certain percentage of physicians. It is not easy, unless one knows or has had much experience, to tell the sheep from the goats, and the "reading notice" giving a large sized endorsement of some nostrum may be as well written and read quite as entertainingly as a proper and scientific editorial in some other and reputable journal. A few new remedies are excellent, have an unquestioned value, and are such as to tempt one to occasionally speak a word of commendation. Yet these are comparatively few, whereas the great mass of preparations concerning which "reading notices" are published are either worthless or out and out nostrums, not fit for any man to use or prescribe. Because these things are true, all reputable medical journals, and especially the official publications of state medical societies, should absolutely refuse to print in their reading pages any sort of advertising matter—and the "reading notice" is advertising. The *Kentucky State Association Bulletin* contains a "reading notice," and without in any way reflecting upon the value or the worthlessness of the thing so advertised, we do not like to see it. We certainly cannot ask private journals, operated for profit, to "please be good", when the official publications of medical societies commit the offences which the medical profession desires to have corrected.

The poor W. C. T. U. has had another spasm, due to a severe shock to its sense (?) of propriety. The lovely old ladies who **ANOTHER** cannot reason logically are decidedly **SPASM.** opposed to letting the West Point cadets smoke; perhaps it is feared the cadets' brains will not develop beyond the caliber of the W. C. T. U.; perhaps there is some other reason. They managed to have an order passed prohibiting smoking by cadets. But when the question was investigated, the officials at West Point had the order rescinded, on the very just ground that the cadets would smoke anyhow, and that it was better for them to smoke pipes and cigars openly than to be led into breaking rules and smoking cigarettes secretly. A law that can not be enforced is a harmful law, for it teaches disobedience. We all know that sumptuary laws are more commonly honored in the breach than in the performance, and most of us would be quite sure that a non-smoking rule at West Point could not be enforced in the slightest degree. The increase of drunkenness following the abolition of the army canteen is well known to

all and stands as a monumental object lesson to the harm a lot of misguided cranks who cannot think logically may do if they are permitted to have the chance.

On page 320 will be found a letter addressed to the JOURNAL in reference to the matter of initial publication which was commented on editorially last month. We would respectfully urge all members to adopt this policy and give us the opportunity to arrange for simultaneous publication when they wish to have their papers published in another journal in addition to their own JOURNAL.

TO THE SECRETARIES OF COUNTY SOCIETIES.

The JOURNAL desires very much to hear, occasionally, from the secretaries of all county medical societies. We wish to know the names of new members, as they come into the society, and the names of those who terminate their membership. You see the JOURNAL is something more than an ephemeral sheet; it is the official record of the State Society. In its pages appear not only papers read at the local and State meetings, but also the business of the Society and all things that pertain to it and its membership. We should have, in this printed record, all information relative to changes in the personnel of the physicians in each county of the State. The Publication Committee would very much like to distribute itself about the State and gather this information without disturbing anyone; but unfortunately there are one or two matters that need attention in the affairs of every member of the committee, so we are compelled to trespass upon the time of the secretaries of the county societies. We know that you gentlemen are also busy, but we think that you can, if you will try, find time enough to send to the JOURNAL, from time to time, the following information: 1st. Brief reports of county society meetings, with, if possible, abstracts of the papers read; or, and better, the papers themselves; 2d. Prompt notice of the death, marriage, sickness, or other happenings of a member of the society; 3d. Prompt notice of those who come into or go out of the county society, and all changes of address. We think we are not asking too much when we make this request, and we earnestly ask every one of the secretaries to take this matter to heart and contribute his share of the work in placing before the profession of the State all such facts as should be so presented and become matters of record of the Society.

The JOURNAL desires to take this opportunity of thanking the secretaries who have already under-

taken to do the work requested, and we sincerely hope that in a very short time we shall be able to extend the same thanks to the secretary of every county society.

Several members have very kindly notified the JOURNAL that they have not received their copies regularly, and in some instances have MISSING had no JOURNAL since May. We beg NUMBERS. to thank them for writing us. We have recently gone over our mailing list very carefully and have made every effort to make the list absolutely correct; yet there may possibly remain some errors or omissions. Unless we receive complaints we cannot tell that members are not receiving the JOURNAL regularly, and we most emphatically want them to get it, and to read it. We will esteem it a favor if any member who lacks any numbers of the JOURNAL to complete his file will kindly advise us, for every member should have the file complete. To those who have recently joined we can send the back numbers and shall be glad to furnish them at a reasonable price. To all members we would say: "Do not harbor the delusion that we object to receiving 'kicks'; we want your criticisms and your complaints."

Typhoid being a preventable disease, there is no time like the present for us to warn the public what pitfalls to avoid. The frequency with which people returning from a camping trip are stricken down with typhoid before they have been at home ten days, and often before they have reached home at all, would suggest that a little advice on how to conduct a sanitary camp would probably prevent many a case of typhoid. Eating raw clams taken from the mud of a little bay into which flowed the sewage from houses containing typhoid patients, is responsible for a recent case of typhoid in Berkeley. In the same town another patient contracted typhoid by drinking water drawn from a barrel on the roof of the house. No one knew when last the barrel had been cleaned out. The water was pumped by hand from a well which had not for many years been uncovered. To forestall such dangers of infection, the duty must fall upon the shoulders of the family physician, who should sound the warning note. It is not sufficient to tell families to boil the water and milk for drinking when there is doubt as to its purity. They must be told that when there is any likelihood of infection they must boil the water used to wash fruit and vegetables eaten uncooked; that the water from washstands must not be used for cleansing the teeth, and that when a local epidemic occurs all water for toilet purposes should be boiled.

The Dental College of the University of California began its twenty-second annual session on Sept. 7th. This college inaugurated this year a four-year course.

HIGHER STANDARDS. An advance in the matter of educational requirement for matriculation is to be enforced next year, for students applying for admission must have received diplomas from high schools or academies accredited to the State University. The trend of the times is toward higher educational standards for admission to medical and dental colleges, and the JOURNAL is pleased to note that one of our coast institutions is among the first to make the step forward and upward.

The JOURNAL would like those who are members of county societies to call the attention of those who are not to the fact that **PHYSICIANS' DIRECTORY.** it is worth while to belong to a county society. It is worth while for a good many reasons, but at the present time we will only refer to one—the material return. Members of county societies are, by virtue of that fact, members of the State Society and as such receive, without further payment than their dues to the county society, the STATE JOURNAL. They will also receive, as soon as it is issued, a copy of the Directory of Physicians of California now in preparation. The directory will go to press in a short time and will surely be issued before the end of the present year. These two publications of the State Society are, from a monetary standpoint, worth a good deal more than the amount of dues paid to any county society in the State. You probably know some one who is not a member of your county society; speak to him about this and hand him, at the same time, an application blank for membership.

From the Orange County society comes a suggestion that should receive the careful and favorable consideration of every county society in the State. A letter from the Secretary, printed on page 321 states that the society wishes to have its proceedings published in the JOURNAL, so that a file of the JOURNAL will be a complete, published history of their county society and its transactions. What could possibly be better? Here is the chance for the least prosperous as well as the largest and most well-to-do county society to have its proceedings printed free, distributed to every one of its members, and preserved for all time. Furthermore, this is exactly the work that the JOURNAL not only should do, but is anxious to do, and if secretaries of county socie-

ties will only help, by devoting a few moments every month to the matter, it will soon and easily be done.

A very important and significant meeting was held in San Francisco on the 8th of September.

MEETING OF HEALTH OFFICERS.

The State Board of Health had sent out invitations to all state, county and town health officers to attend a meeting at which an organization of these officials could be effected and the work of all be brought more into harmony. Some thirty-five or forty out of about one hundred and fifty or sixty, attended the meeting. A permanent organization was formed under the name of the State, County and Municipal Sanitary Conference of California, and the intention was declared to hold an annual conference. The matters presented in the shape of papers and discussions were most excellent and valuable. The conference is to be called to meet at the time of the State Society meeting, and at the same place. Many, if not most of the health officers are members of the State Society and attend its meetings. As the Conference is called to meet with the State Society, there will undoubtedly be a large attendance.

DELINQUENT MEMBERS AND THE JOURNAL.

Some months ago the Secretary, acting on instructions from the Board of Trustees, ordered the JOURNAL stopped to those members who were delinquent for dues under the old constitution. The Secretary has spent considerable time and postage in an effort to collect this money. He has patiently sent notice after notice, and in several instances made personal appeals. Some of these members have not taken kindly to the action made necessary by their procrastination, and have actually used the argument that by becoming members of affiliated county societies they have the right to repudiate this debt. Whether or not they are correct from a legal standpoint, the fact remains that it costs money to run a journal, and for a society to prosper its business affairs must be conducted on business principles, which cannot be done if outstanding accounts are allowed to remain on the books unpaid. There now exists another class of delinquent members comprised of those members-at-large who owe for this year's dues. According to the Constitution such dues should have been paid within thirty days following the last meeting. It is to be hoped that these members will promptly remit the amount of their delinquency, for it is desired to have the JOURNAL, as well as the Directory, which will be published

shortly, reach every member of the State Society. All those who were members-at-large at the time of the Santa Barbara meeting, April last, owe the Society three dollars, irrespective of whether they have subsequently joined an affiliated county society or not. Most of these members have paid, some have not; please pay up! Make remittances for dues to Dr. George H. Evans, secretary, 807 Sutter street, San Francisco.

THE CITY AND COUNTY HOSPITAL.

The JOURNAL's comments in the August number on the needs of the City and County Hospital of San Francisco, and the methods of use of the \$10,000 extra appropriation, have resulted in further information on the subject, some of this having come voluntarily and some in response to inquiry.

The resident physician, who is the executive officer of the Board of Health, states that one of the difficulties he has to contend with is inefficient employes and too frequent changes of them; that to secure better men and to keep them longer he has to pay more in wages and salaries, and that this is one way of distinctly improving the service and adding to the comfort of the patients. Independent testimony supports this contention of the resident physician.

In the present condition of the labor market it is easy to understand that every one holds his labor at a higher figure than a short while ago, but it is yet to be shown that the world is getting its work done in a better way because of the higher price it is paying for it, and it would be somewhat extraordinary if the microcosm of the hospital differed in this from the macrocosm about it. Surely it will not benefit from the increased pay given unless the inefficient are weeded out, for no bad servant can be made into a good one by giving him higher wages. But the JOURNAL agrees, as it might be supposed it would do, from what it said in August, that a number of the officers should command higher pay than they did or than they do.

The JOURNAL commented favorably in August on the proposed increase in the number of nurses, and it is now informed that there are ten or twelve more nurses in the hospital than there were a year ago; but it has also learned that these do not count for what they were expected to in the wards, and that they have not materially improved conditions there. It is possible that these women, being still probationers, cannot do what may be reasonably expected of them in time, but even now they should be able to set free from day duty enough junior or senior nurses to increase the night force, which the

JOURNAL is informed is still inadequate. Granting that the full quota of nurses has been filled, they are not enough; but the prospect of adding to them is not great, for it will need the appropriation of more money and the building of an addition to the nurses' home, which is at present too small.

The JOURNAL also announced that it would be interested in the way the balance of the \$10,000 was to be expended, and it has learned these facts regarding this point: There are now in the hospital more than forty more patients than there were a year ago, and the chances are that the number will be kept up above last year's average; and this increased number of patients must result in an increase of expense. Some of this money will go in that way. The prices of the staple foods, particularly meat, milk and flour, have advanced, and some more of the money will go in that way. However, it is claimed that there will still be a residue for special betterments, and among these new sterilizers and an X-ray outfit were mentioned. It is difficult to say which of these is the more important, but the need of the latter is obvious and it should have been put in long ago.

In spite of this critical spirit of the JOURNAL regarding these special matters, it is still of the opinion, and frankly acknowledges it, that not enough money is given for this service, in the first place, and it knows that everything everybody wants cannot be gotten for 0.70c per caput per diem. This part of the fault lies with the Supervisors, for no matter what may be their opinion of the motives or acts of the Board of Health, they should know that it is an impossibility for any board, good, bad or indifferent, to conduct a proper hospital in a proper way on this amount, and still more impossible to conduct an improper hospital properly.

THIS IS YOUR JOURNAL.

It is certainly a pleasure to know that the labors of the Publication Committee are appreciated, and that the members of the Society are pleased with their JOURNAL. A number of very nice letters have been received, and we wish to thank the writers for their kindly expressed good wishes. But there seem to have been some misunderstandings which it is desirable to point out. To this end the letter from the president of the San Bernardino County Medical Society is printed in full on page 341. Subscriptions to the JOURNAL are included in the dues paid to the county society to which a member belongs, and we wish to call the attention of all who are not clear on this point to the following statement:

On page 197, of the June number of the JOURNAL will be found the following resolution

which was passed at the Santa Barbara meeting:

Resolved: That out of the funds contributed by, and belonging to the members of the Medical Society of the State of California, the Trustees are authorized to appropriate such an amount as is necessary to secure the subscription of each member to the California State Journal of Medicine.

The payment of dues to a county society secures first, membership in the county and in the State societies; and second, the subscription to the JOURNAL and to the Register of Physicians of California, shortly to be issued. The county society pays to the State Society an annual assessment per capita; out of the funds so secured the Trustees have appropriated sufficient funds to secure the subscription of each member to the STATE JOURNAL, and consequently no further sum is required from members of affiliated county medical societies. It is certainly gratifying to see the number of men who are anxious to pay not

only their dues to the county society, but a subscription to the JOURNAL as well. The JOURNAL has not reached the plane it set for itself, but it is steadily nearing it. We are doing our very best to make it all that it should be and when members write of "our JOURNAL," we feel that our efforts are meeting with some modicum of success. Each member of every county society in the State should think and speak of the JOURNAL in that way; as his JOURNAL; his individual property; something that he has helped to make and something in which he has an individual ownership and interest. When the time comes that this is the case, the JOURNAL will have succeeded in its desires and intentions and will have the very best warrant for existence. We have several times asked that "kicks" be sent in to the office; we mean that, too, but we would here take the opportunity of mildly hinting that we do not object to "a few kind words" now and then.

National Bureau of Medicines and Foods.

The *Western Druggist*, in a four-page editorial, violently and virulently assails the proposed plan for a National Bureau to secure betterment in the medicines and foods of the country. Without at this time calling up the whole argument of the publication in question, nor demonstrating the reason for its bias, which will be done in due time, I simply desire to reply to one statement. The statement is made that the proposed measure of certification of worthy products is new, chimerical, foolish, impractical, untried, poor logic, and generally puerile and idiotic. All of which is simply misstatement of fact. In Minnesota the flour industry has been purged of adulteration entirely by means of a plan of certification of pure flour; and this result was reached not through a large organization, but through a small private organization. More recently the Department of Agriculture has authoritatively made the same pronouncement in favor of a plan for certification of the worthy product, in the matter of the milk supply of cities. Bad and abusive language is very often mistaken by small minds for logic. Apparently the *Western Druggist* has fallen into this error, for it seems to think the men who have been advocating the proposed National Bureau plan are not serious, are exceedingly ignorant, and are to be discouraged simply by the explosive utterance of immoderate language. Stirracious editorials will not outweigh calm reason, and violent attack will not confute logic. If the editor of the *Western Druggist* will have the courtesy to give his reasons for attacking the proposed bureau, I shall be very glad to consider them; in the article referred to he has given none. This is to a certain extent a personal matter with me, for the reason that I am largely personally responsible for this particular feature of the plan of the proposed bureau.

PHILIP MILLS JONES.

To Merck & Co.

The practice engaged in by manufacturers of nostrums, of publishing in or with their advertisements, letters from fictitious persons or individuals of no particular standing or repute in their own com-

munities, is well known. That a first-class house, manufacturing medicinal preparations which it recommends to physicians the country over, should indulge in such questionable methods intentionally and with a purpose to deceive, seems hardly probable. Possibly Merck & Co. have expended some money carelessly. A recent advertisement of theirs reads as follows: "Dr. Carl L. Schilling, San Francisco, Cal., writes: 'I have been using for over two years, and cannot say too much of it. I prescribe it wherever a general tonic is indicated and with very good results.'" There is no such name as Carl L. Schilling to be found in any register of physicians. Polk, of the many errors, has listed a "Carl Schilling" who is indicated as having graduated from the Missouri College of Medicine in 1880. The last Register of California has neither "Carl" nor "Carl L." The former Secretary of the Board states that if the name is not found in the 1902 Register, the individual did not receive a license.

The present secretary's office has no knowledge of any such person having applied for a license under the present law. Either Merck & Co. have been mighty careless, or—? In any event, it rather looks as though an apology from them was due the medical profession of the country, and especially the medical profession of California.

The *National Druggist*—July, prints an editorial anent the proposed establishment of a National Bureau of Medicines and Foods, (which, by the way, it does not like to think about). One sentence only, we quote: "What manufacturer of proprietaries would be willing to print the formulae of the articles on his labels (sic) or even to make them known to an irresponsible board?" The peculiar and touching inconsistency of the editor is shown by comparison with the editorial immediately following, headed "Sell goods for what they are", and is a plea against deception in the matter of *perfumes*! Any old way is all right for medicines, because they are only medicines; let the manufacturer put up whatsoever he pleases and call it what he will, and tell the truth about it or not, just as he chooses; it's only medicine.

COMMUNICATIONS.

Further Discussion on Dr. Sherman's Paper Published in August Journal.

To the Editor of the *State Journal*: Flippancy and irresponsible remarks uttered in medical societies do not call for an answer; but when they appear in an extensively read journal, it becomes imperative to expose error and illiteracy. In the discussion of Dr. Sherman's recent communication to the San Francisco County Medical Society, I endeavored to call attention to two distinct points: 1st., the necessity of rigorous methods in order to avoid errors in diagnosis from contamination; 2d., the increasing importance of the study of anaerobic bacteria in suppurative conditions. I then suggested and still maintain that to submit a specimen to a long journey prior to subjecting it to culture is not in accord with the precision demanded by modern bacteriologic methods. Dr. Sherman admits "that the appendix was taken from St. Joseph's Hospital, where the operation was done, to St. Luke's Hospital, and sent into the laboratory." He also recognizes the "possibility of contamination." I further remarked that the first indispensable step in all bacteriologic diagnoses consisted in making a smear for direct examination. If no bacteria be found, cultures may be dispensed with. But if, on the contrary, a variety of forms be noted, then each variety must be isolated and studied by means of proper culture media. Had Dr. Halton pursued this well-known laboratory method, all criticism and discussion would have been avoided, for no one denies the pyogenic properties of Friedlander's bacillus.*

In answer to my reference to the silence of American writers concerning anaerobic bacteria, Dr. Halton says: "I think that more attention has been given to the anaerobic bacteria than Dr. Tait realizes, and I also think that the reason this work has not been reported is because of negative results obtained."

As corroborative of my assertion, the following facts may be mentioned: (1) In the index of current medical literature published by the *Journal of the Amer. Med. Assn.*, only two American contributions are found during the past two years and a half. Thomas Brown, (in *New York Medical Journal*), 1901, in the study of 57 cases of cystitis, failed to look for aerobias! (2) The absence of complete bacteriologic diagnostic methods in such learned American institutions as the Johns Hopkins Hospital, the Massachusetts General Hospital, etc. (3) The failure of 85% of applicants at a recent Cal. State Board examination to "name two anaerobes."

No one who has followed the development of bacteriology within the past four years will deny that while the number of practical discoveries is rather limited, the study of anaerobic bacteria has opened up one of the most interesting fields of clinical and pathologic observation. Thanks to the efforts of the French school, the entire history of biliary infections is being rewritten on this basis. (Gilbert, Fournier, Lippman). Belief in the frequency of sterile pus has been shattered; the so-called sterile pus, especially that of hepatic and pleural origin, is now known to frequently contain anaerobes. (Babes, Gilbert, Tavel, Courmont). The clinical study of urinary infections, (Albarran, Hallé); study of etiology of cystitis, (Hartmann and Roger, Leguen); of periurethral suppurations (Cottet) has recently been almost remodeled, and the various peritoneal suppurations (Veillon and Zuber, Tissier, Van Ermengem, Cour-

mont, Klein); empyema, (Veillon, Hallé); diverse cranial infections (Guillemot, Rist, Morax) have also profited immensely by a closer consideration of anaerobes. Hartmann, in his recent original contribution—*Travaux de Chirurgie Anatomique-clinique*, 1903—devotes an entire section to the study of anaerobes in cystitis, demonstrating their all-important role. The bacteriologic study of appendiceal pus, circumscribed peritoneal abscesses and general peritonitis, has shown an almost constant predominance of anaerobes over the aerobic bacteria; in numerous cases the anaerobes alone were present. "The later the surgical intervention, the more varied the bacterial flora of appendiceal pus." (Rist, Veillon, Courmont.)

By consulting the files of the *Annales de l'Institut Pasteur*, the *Centralblatt f. Bacteriologie*, reading carefully the reports of learned societies, perusing a few French and German inaugural theses, Dr. Halton will learn that Veillon's work has been both confirmed and vastly added to by a long list of experimenters who demonstrated the pathogenic properties of more than eight anaerobes and illustrated the marked virulence resulting from the association of a harmless staphylococcus with an anaerobe. It will also become apparent that anaerobes are not confined to gangrenous tissues, as claimed by Dr. Halton, but more often found in suppurative processes. (Courmont, Roux, Rist, Guillemot, Gilbert, H. Roger).

If, however, in Dr. Halton's opinion, bibliographic data be inadequate proof, I suggest that a personal inspection of the laboratories of such authorities as Roux and Metchnikoff, at the Pasteur Institute; Travel, at the great Kocher's clinic; Albarran or Gilbert, in the Paris hospitals, would furnish incontrovertible evidence of the incompleteness and unreliability of the methods adopted in the study of Dr. Sherman's case, thus demonstrating my original contention that a dilettante can never be *persona grata* in the field of bacteriologic research.

REFERENCES:

- Veillon et Zuber-Archives de Med. Exper.* 1898, p. 517. *Soc. de Biol. Paris*, 1893, 1897. *Bul. International Med. Congress*, Paris, 1900.
Rist—*These*, Paris, 1898. *Bul. sec. med. des. Hop.*, Paris, 1901, p. 463. *Br. Med. Journal*, 1901, p. 1052. *Central f. Bact.* 1901, p. 287.
Guillemot—*These*, Paris, 1898.
Cottet—*These*, Paris, 1899.
J. Hallé—*These*, Paris, 1898.
Courmont—*Traité de Bacteriologie*, 1902.
Albarran—*Bul. International Med. Congress*, 1900.
Hartmann et Roger—, in *Travaux de Chirurgie anatomique-clinique*, Paris, 1903.
Gilbert et Lippman—*Soc. de Biologie*, Paris, 1902-3.

DUDLEY TAIT.

Initial Publication.

To the Editor of the *State Journal*—Responding to your editorial concerning "Initial Publication," I beg to say that although I have no reason to believe that a paper I read at Santa Barbara on "Tuberculosis of the Peritoneum and Adnexa" will be selected by the committee for publication in the *JOURNAL*, it is but courtesy to the committee to say that the MS. has been accepted and will be published by the *New York Med. Journal*, but of what date I am unable to tell. Having done much of the editing of the transactions of the society of a distant state in years past, I can readily appreciate the embarrassments of the committee, and it was in ignorance of the custom in California that I did not earlier formally request the privilege of publication elsewhere. While at Santa Barbara I did enquire of the secretary (Dr. Evans) what privilege the contributor had in this instance, but the impression his reply left upon my mind was that it was quite at the election of the contributor.

Very sincerely yours,

ANDREW STEWART LOBINGIER,

Los Angeles, Sept. 5, 1903.

*Pure cultures of Friedlander's bacillus, in peritoneal suppurations, have been reported by several French writers (Villemain, *Sec. de Pédiatrie*, Paris, June, 1901), Courmont, *Traité de Bact.*, Lyon, 1902.

Excellent Suggestion.

Santa Ana, Cal., Sept. 11, 1903.

To the Editor of the State Journal—Replying to yours of the 10th will say that Dr. Ball, one of our Society members said yesterday that if we could secure a complete file of the JOURNAL he would contribute the binding of the first volume and suggested that I send a report of each meeting in order that it might become a history of the Society and be placed in the library. If you will kindly send us the complete file we will see that each volume is bound and kept in the library.

Respectfully yours,
H. S. GORDON,
Secretary.

(Note.—This is an excellent suggestion and one that should receive the careful consideration of all county societies. The JOURNAL should be the printed history not only of the State Society, but also of each of the component county societies. This it will be just as soon as each and every county society sees to it that some one member, either the secretary or someone else, looks after the work of sending in to the JOURNAL reports of the county society meetings, and all news and matter relative to county happenings.—Ed.)

County Society Reports.

To the Editor of the State Journal. Sir: If the Publication Committee still declines to publish our reply to the Resolutions passed by the Santa Clara County Medical Society, kindly return our paper by bearer. We do not feel that a shorter or less specific reply will compensate for this unjust attack and shall be compelled to seek redress through other channels.

We shall be pleased to have you publish this letter in your October issue. It will serve to show the profession that we do not intend to remain quiet under these charges.

Yours truly,
D. A. HODGHEAD,
W. F. SOUTHARD.

In the September issue of the JOURNAL appeared the report of the August meeting of the Santa Clara County Medical Society. It was printed for the reason that the Publication Committee has, from the first, declared that, in its opinion, one of the principal reasons for the existence of a State Journal was that the reports of all county societies might be published and become matters of record. If the JOURNAL does not exist for that purpose more than for any other, we are profoundly mistaken. At the meeting referred to certain resolutions were passed anent a suit against the Board of Medical Examiners. These resolutions contained matter reflecting upon the motives actuating those bringing the suit and upon those connected with a medical school in San Francisco. The gentlemen in question prepared a statement in reply and sent it to the JOURNAL, requesting that it be published. The editor declined to assume responsibility in the matter and referred it to all the members of the Publication Committee who could be reached immediately. These members, without exception, decided that the matter as sent in should not have space in the JOURNAL for the

following reasons: 1st, The report of the county society was a matter of formal business of a component society and its publication was proper; 2d, the reply sent in was a personal communication in which a personal attack upon a member of the society was made, and an intemperate attack upon the Society itself was included; 3rd, that such being the case, it was decidedly and extremely controversial, and we are proscribed from entering into matters controversial. The editor offered to assume the responsibility of publishing in this issue a general letter of denial addressed to the county society and not to the JOURNAL, (for the JOURNAL had made no arraignment) which should be free from all matters of a personal nature and all attack upon the State Society. This offer was not accepted by these gentlemen, hence the Committee feels that this explanation is due the members of the Society. Personal communications containing matters controversial (except for discussion of scientific questions), will not be published in the JOURNAL.—Ed.

PERSONAL MENTION.

Dr. August Pohlman has been appointed assistant professor of anatomy at the Johns Hopkins University.

Dr. O. C. Fitzgerald of Los Angeles, who has been very ill for some months, is able to return to his office.

Dr. W. A. Taylor and Dr. William F. Blake were recently elected members of the Santa Barbara County Medical Society.

Drs. W. R. Davis, J. B. Thomas, C. W. Hack, G. S. Wallace and F. Du Bois of the Army, have returned from service in the Philippines.

Dr. John G. Curtis, professor of physiology at the College of Physicians and Surgeons of Columbia University, has been elected acting dean of the college.

The following named physicians have become members of the Santa Clara County Medical Society: J. U. Hall, T. A. Perrin, J. D. Grissim, R. A. Whiffin, Paul Sanford, F. H. Paterson, L. V. Saph, M. S. Silva, E. I. Filippello, I. N. Frasse.

Dr. Joseph Marshall Flint, professor of anatomy at the University of California, and Miss Anne Apperson, niece of Mrs. Phebe Hearst, were married on September 15 at the summer residence of Mrs. Hearst, Hacienda del Pozo de Verona, near Pleasanton.

Dr. E. W. Scripture, assistant professor of experimental psychology at Yale University, has resigned and is succeeded by Dr. Charles H. Judd, A. B. (Wesleyan), Ph.D. (Leipzig). Dr. Scripture is spending the year at Leipzig, where he is carrying on researches on the analysis of speech by means of gramophone records under the auspices of the Carnegie Institution.

Recent removals: Dr. A. H. Taylor and Dr. George B. Somers, from 123 Ellis to 606 Sutter Street; Dr. G. H. Boskiwitz, from 1106 Post to 1220 Sutter; Dr. W. P. Willard, from 1805 Fillmore to 1207 Sutter; Dr. E. W. Thomas, from 417 to 439 Third; Dr. Philip King Brown, from 1303 to 1612 Van Ness Ave.; Dr. Kate I. Howard, from 590 Sutter to 1600 Fell; Dr. A. B. Grosse, from 2124 Post to 803 Sutter; Dr. Louis A. Kengia, from 1121 to 1220 Sutter; Dr. Emmet Rixford, from 1400 Van Ness to 1795 California, San Francisco.

LUPUS ERYTHEMATOSUS*

By ALFRED B. GROSSE, M. D.

IT IS not my purpose to deliver an exhaustive paper on Lupus Erythematosus this evening, but simply to present to you a brief epitome of the present aspect of the disease, its therapeutics, a description of the Hollaender method, how it was arrived at, and my results with the same.

The disease was called Lupus Erythematosus by Cazenave in 1851, Seborrhoea Congestiva by Hebra in 1845, and Ulerythema Centrifugum by Unna.

The disease begins with one or more pinhead to linnet-seed sized red slightly elevated macules with primarily a smooth glistening surface which later becomes depressed in the center and which depression is either topped by a scale or shows a cicatricial shining dimple. The scale is usually adherent to the patulous duct of a sebaceous gland. Kaposi divides the disease into two forms: lupus erythematosus discoides and lupus erythematosus disseminatus, both of which arise from the above described primary efflorescence. The seat of predilection is the nose and its surrounding structures; the mucous membranes of the face, and the scalp and hands are sometimes attacked, no part of the body being immune. Women are more prone to the disease than men.

Therapeutics—From the number of drugs and procedures that have been recommended it will easily be seen how intractable the disease sometimes is. 1, Kaposi recommends the application of tr. sapo. virid; 2, a 10% salicylic ac. soap plaster has given more or less results; 3, Ichthyol in varying strengths has been used; 4, Resorcine paste 5 to 20%; 5, Ung. hg. ammon. 5 to 10%; 6, Ung. B-naphthohol 3% to 4%; 7, Lassar's schaeelpaste, i. e. sulph. naphthohol paste; 8, Jarisch recommends 5 to 10% ac. pyrogall paste; 9, Hot compresses of liq. alum. acet. have been quite successful during the acute stage; 10, linear and punctate scarification as well as radical curettement have been tried; 11, Electrolytic puncture or punctate cauterization with paquelin is advised by Lassar. Hollaender hot air cauterization has been successful with some of Lang's patients; 12, Ung. hg. iod. from 5% to 30%; 13, Cauterization with bichloride hg., collodion ac. carbolic, ac. trichlor acet., sol. Fowler or tr. iod.; 14, Painting with equal parts of spts. vin. rect., spts. menth. pip. and sluph. ether. This was recommended by H. Hebra and used quiet successfully by Neisser, Jarisch and Lang; 15, X-ray and Finsen ray have in some cases given good, and in others no results. I refer to the reports of Freund who has charge of light therapy in the Vienna clinic. My own experience with the Finsen treatment, though favorable, is as yet too limited to allow the drawing of definite conclusions; 16, Internal remedies

have never evidenced any specific action, with possibly the exception of quinine 15 to 20 gr. per day given for a number of months as advised by Wolff. Neisser has had some favorable results with this treatment.

Histo-pathology. Many examinations are extant, but I will only cite those of Neumann, Kaposi, Jadassohn and Unna, whose results agree in the main; i. e. inflammatory infiltration of the vessels of the corium, particularly in the subpapillary ones that are distributed to the glands, ducts and hair follicles. This focal infiltration is considered the principal factor, the question at issue being whether the process spreads from below upward or *vice versa*. Jadassohn has shown the process to be diffuse on the surface becoming more circumscribed as it dips deeper into the corium.

Jadassohn's paper of 1896 which discusses the pros and cons of the various publications in favor of and against tubercular origin and connection of the disease, may here be briefly cited, together with the later publications of Roth and C. Boeck.

In favor of its tubercular origin and connection.

1, Lupus Erythematosus is always, or at least most frequently, found in tubercular individuals; 2, Lupus erythematosus patients are often attacked by tuberculosis, especially of the glandular type, and often die of tuberculosis; 3, The clinical picture of lupus erythematosus and lupus vulgaris are very similar; 4, there are transition stages between the two diseases; 5, Lupus erythematosus may react to tuberculin; 6, Roth's statistics prove the presence of tuberculosis in most cases of lupus erythematosus; 7, C. Boeck's hypothesis that the skin lesion is due to toxins evolved by the bacillus tuberculosis in the organism.

Against tubercular origin of lupus erythematosus. 1, Tuberculosis is not more frequent in patients with lupus erythematosus than in those suffering from other chronic diseases; 2, Tuberculosis attacking such patients is either simply accidental or due to the depressing or weakening tendency of the system from long existence and invasion of the disease; 3, Lupus vulgaris and lupus erythematosus are not to be mistaken for one another; 4, The supposed transition stages do not exist and have never been satisfactorily demonstrated; 5, In the majority of cases no tuberculin reaction took place; 6, Histologically they are totally different, neither microscopically, culturally nor by inoculation have tubercle bacilli been demonstrated in lupus erythematosus.

Hollaender, the originator of the hot-air treatment for lupus which up to date is the most satisfactory when large areas are involved, had, among the many lupus cases that came to him for treatment, quite a number of lupus erythematosus patients, none of whom were benefited by

*Read before the S. F. County Medical Society, August 11, 1906.

the treatment. He deduced from this the absence of the bacillus tuberculosis in the skin. Having tried k. i., ergotin and other drugs, thinking the disease due to a capillary disturbance, he stumbled, as it were, upon his present treatment, the internal administration of quinine gr. 7, three times a day, and painting the skin lesion with tr. iod., 10 minutes after the ingestion of the quinine, i. e., upon the reaction of the skin lesions. This reaction he considers pathognomonic and of as much importance in lupus erythematosus as the tuberculin reaction in lupus vulgaris. This treatment is persisted in for about six days when a fair-sized lamellar scab forms which is approximately exfoliated in six days when treatment is again resumed. This course is persisted in for weeks or months until cure takes place. Patients who seem cured but still have an itching sensation in the old patches, though the skin shows no sign of trouble, will quickly react to quinine at these points, demonstrating remaining foci. Quinine without tr. iod. has in some few cases been beneficial, while the sole employment of tr. iod. does rather more harm than good. Having had several cases in the past which gave more than ordinary trouble, no relief being obtained from the many therapeutic procedures, and reading the description of this treatment with the number of reported cases appended, the great simplicity of the treatment and the marvelous results reported, prevailed upon me to try it in a very obstinate case recently under my supervision. We must not lose track of the fact that this disease sometimes tends to sudden auto repair so that a cure, or even several, must not be considered absolute results. What impressed me particularly was the local reaction obtained after the ingestion of quinine.

Date, Jan. 4, 1901. Diagnosis. Lupus Erythematosus. Name, Mrs. L. K. Occupation, housewife. Nativity, Pole. Age, 29. Family history. Father living and healthy; mother died in childbirth; 2 sisters living and healthy; one brother died at sea; another brother, age 24, is healthy. No tuberculosis in family. Previous history: Always healthy; had 2 children at term; has been losing in weight for last year; 5 feet 6 inch in height; weighs 145 lbs.; formerly weighed 160 lbs. Present illness: A patch on the bridge and both sides of the nose and the cheeks adjoining. Butterfly shaped, periphery raised, center depressed, ducts patulous. Physical examination negative, blood negative, hemoglobin 90%; no differential count made; no reaction to the tuberculin test. Treatment: Iodid amylin, drachm i three times a day, emplast hg., locally applied Jan. 11, '01. No result; condition about the same. Feb. '01, creosoti gts. three times a day; painted with Fowler's solution. Patches slowly enlarging. March, '01. Stopped internal treatment; hot liq. alum. acet. compresses, followed by slight improvement. May, '01. A change to worse; general condition not so good; complaints of dizziness, weakness in limbs, skin lesion increasing; a new one on scalp; strychnia, gr. 1/40 three times a day and ung. ac. pyrogall. 5%. June, '01, no result; patient discouraged; cessa-

tion of treatment; sent to high Sierra. August, '01, improvement in general condition; new patches to left of sternum and on left ear; painted with ac. carb., three times a week. October, '01, no result; patient despondent; pil. asiaticae in increasing doses; painted patches with equal parts of alcohol, ether and spts. peppermint. Nov. '01, slight improvement; no increase of old and no new patches. Jan. '02, general condition poor; insomnia; lack of appetite; physical examination negative; patches on index and middle fingers of right hand resembling chilblains. Stopped arsenic; used punctate paquein cautery. March '02, condition about the same; elix. ferri quin. et strychn., internally, and ichthyol externally. April, '02, slight general improvement. May '02, no improvement; patient hopeless; wishes to try Christian science. Aug. 16, '02, sent for patient; condition worse than when last seen; weight 136 lbs., plaques covering nose, both cheeks, left ear, two patches on scalp, hair destroyed, one near sternum and on index finger of right hand; middle finger seems well. Quinine gr. 8, 3 times a day, and tr. iod., painted on patches on reaction. Aug. 25, '02, good-sized scaly scabs; intermission Sept. 1, '02; scabs exfoliated, patches improved, treatment resumed. Sept. 6, '02, scabs formed, no bad results, treatment discontinued. Sept. 15, '02. Scabs exfoliated, general improvement, patches smaller, treatment resumed. Sept. 20, '02, scabs formed, feeling well, no objection to quinine, treatment discontinued. Sept. 29, '02, scabs exfoliated, marked improvement, patches smaller, finger well, treatment resumed. Oct. 4, '02, scabs formed, feels well, treatment discontinued. Oct. 13, '02, scabs exfoliated, almost cured, treatment resumed. Oct. 18, '02, scabs formed, treatment stopped. Oct. 27, '02, scabs dropped, looks absolutely well, Lassar's paste. Nov. 12, '02, slight itching in site of old patches, particularly on both sides of nose; a little reddening, looks like relapse, treatment resumed. Nov. 18, '02, scabs formed, treatment stopped. Nov. 29, '02, scabs fallen; seems well, treatment resumed. Dec. 4, '02, scabs formed, treatment discontinued. Dec. 11, '02, scabs dropped, patient well, ung. diachili. Jan. 20, '03, no relapse. Feb. 14, '03, no relapse. April 2, '03, no relapse. May 2, '03, no relapse. Aug. 27, '03, patient looks well, has gained greatly in weight, general health good, scars of skin lesions flat and slightly telangiectatic.

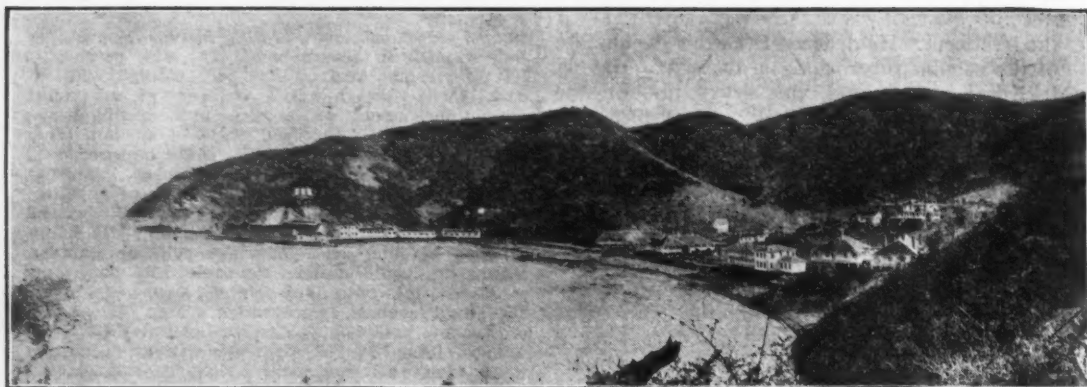
The case of the man aged 34 years with a plaque involving left ear and greater part of left cheek has, like the above reported case, gone on to uneventful recovery under this treatment.

Deaths.

Dr. O. H. Simons died at Magnetic Springs, Santa Cruz County, on August 22. He was born in Ohio in 1846, graduated from the University of Pennsylvania, served in the Civil War and was U. S. consul at Hong Kong from 1889 to 1894.

Dr. Warren H. Blood died September 12 at his residence in Oakland of pneumonia. He graduated from Cooper Medical College at the age of 21 and was 39 at time of his death.

A prospective "new remedy"—"Under proper conditions sugar is a remedy against chlorosis, anemia, and in scrofula." (*Drogistsche Rundschau*, translated for *Nat. Druggist*.) It certainly is astonishing that we have not already on the market a number of brands of this new and highly beneficial remedy, each under a controlled name and each infinitely better than any similar preparation that anybody ever heard of. But there is yet time.



THE SAN FRANCISCO QUARANTINE STATION.

By HUGH S. CUMMING, M. D.

Passed Assistant Surgeon, Public Health and Marine Hospital Service.

TO INTERFERE with commerce and commercial interests as little as is consistent with the sanitary safety of the whole country; to ever hold its health interest more important, but never to forget that commercial well-being is also essential to the country; that undue interference with commerce entails poverty, that poverty itself brings unsanitary conditions, and consequent sickness and death; that, therefore, while neglect of sanitation is a crime against nature and the body politic, illogical, misdirected, over-zealous efforts in sanitation may defeat the very object of all sanitation; the preservation of the well-being, the increase of happiness and longevity of the individuals forming a community or a nation, should be the object of every sanitarian. The ability to rightly balance the two interests—sanitary safety, commerce—which, from a broad standpoint, are interdependent, but which, in individual cases, seem widely opposed, constitutes the true sanitarian, but especially the successful quarantine officer. Quarantine, therefore, does not guarantee absolutely the prevention of the importation of a case of infectious disease, nor does the most perfect fire department or regulations do away with all fires, or double track and block system stop all railroad accidents; but, because of this we do not stop all commerce with infected ports, forbid all fires in cities, or cause all railway trains to cease running; nor would we throw away all railway signals, break up all fire apparatus, or abolish all quarantine restrictions. On the other hand, we should require such buildings as will lessen the danger if fire should start, and communities should recognize that, while outposts and guards are essential and should demand the best possible quarantine, they should also place themselves in such sanitary condition that even if dis-

ease should gain entrance, it would find little opportunity to spread.

The National Quarantine Station for the port of San Francisco, conducted by the Public Health and Marine Hospital Service of the United States, is, in a quarantine sense, the "heir of all the ages," and it is "in the foremost ranks" of the quarantine stations of the world. Its equipment is the result of evolution and the survival of the fittest in inspecting, disinfecting and detention facilities, and the rules governing it.

"The Quarantine Laws and Regulations of the United States, 1903," are the most enlightened, logical and scientific governing any country. While it is true that even the earliest laws of Virginia, Pennsylvania, Massachusetts and one or two other colonies, provided for detention and disinfection by the air, sun or fire, of infected vessels, and that Congress, in 1799, passed a national quarantine law requiring all officers of the United States to assist in executing state quarantines and directing Collectors to require a pratique, it is equally true that modern quarantine methods were not begun until about 1880.

Surgeon-General John W. Woodworth, in a notable address before the International Medical Congress, Philadelphia, 1876, presented conclusions adopted by the Congress, recommending port and internal sanitation, etc., and after a series of investigations by Congress, the American Public Health Association and others, which showed inadequate, barbarous laws and worse practices in some of the states, the law of 1878 was passed, giving authority to the Marine Hospital Service.

In 1879 the National Board of Health, composed of appointees from various states and the three Services, started four "stations of refuge" on the Atlantic coast, for infected vessels from

inadequately equipped state and local stations, but no station on this Coast. In 1883 the quarantine functions reverted to the Marine Hospital Service.

In 1883 the Governor of California applied to the Marine Hospital Service for the establishment of a national station at this port, on account of the danger of introduction of yellow fever from the Mexican coast, where it was raging; and of cholera and smallpox from the Orient. There was, unfortunately, no available money for the construction of a permanent station, and the authorities of San Francisco, while willing and ready for a permanent station, declined the proffer of a boarding station and an inspector.

In 1885 recommendations were again made by the Marine Hospital Service for the establishment of a government station at this port, and attention was called to the fact that there was no effective quarantine on the Pacific coast, despite yellow fever, cholera and smallpox threatening it. In 1886 this recommendation was renewed, and a board of medical officers of the Army, Navy and Marine Hospital Service, selected the present site.

August 1st, 1888, "an act to perfect the quarantine service of the United States" was approved. This act provided that the quarantine should be conducted by the Marine Hospital Service, in accordance with the act of April 29th, 1878, and provided for stations at San Diego and Port Townsend, and also contained the following:

For the quarantine station at San Francisco, California: Hospital buildings and officers' quarters, disinfecting machinery, warehouse and wharf, steam tug, small boats, expenses for the fiscal year eighteen hundred and eighty-nine, one hundred and three thousand dollars.

A board appointed to select a site, consisted of the Collector of Customs, the President of the State Board of Health of California (R. Beverly Cole, M. D.) and Surgeon Sawtelle, M. H. S. then on duty at the Marine-Hospital.

The War Department, on request, transferred a part of Angel Island, in San Francisco harbor, for the station. The Service, recognizing the importance of San Francisco, planned a complete equipment for the station. No time was lost in planning or construction; work began on April 15th, 1890; the wharf and buildings were finished on December 30th, 1890, and the disinfecting machinery about January 15th, 1891. The station thus completed, cost \$97,841.00. A fumigating steamer, equipped with sulphur furnace, was completed in 1892, at a cost of \$28,900.

In 1893 the U. S. S. *Omaha* was transferred by the Navy, and made suitable for the detention of suspects. In 1895 the fumigating steamer *George M. Sternberg* was made a boarding steamer, and the hulk *Omaha* moved from the cove to an anchorage, and used as a fumigating hulk. In 1895 a fast steam launch, the *Bacillus*, was con-

structed at a cost of \$3000, and \$5000 appropriated for a bath house for passengers, and a laboratory fitted out sufficiently for all ordinary purposes.

Under the act of Congress approved June 6th, 1900, there was appropriated for improvements: Iron pier for disinfecting plant, \$100,000; electric light plant, \$10,000; additional accommodations for cabin passengers, \$10,000; water system, \$5000; heating apparatus, \$2000; extension of disinfecting and isolation buildings, \$3500; disinfecting and laundry appliances, \$1200; in all \$131,700.

A board of pilots, and others, decided that it would be hazardous to dock the immense vessels now plying to this port at any pier built at the station; other sites could not be secured from the War Department, and a floating plant was decided upon, but has not yet been constructed.

Plans are now completed for a suitable boarding tug to take the place of the converted fumigator *Sternberg*, whose usefulness has been outgrown by the commerce of this port.

The station is situated on Angel Island, about five miles north of San Francisco, being located in Hospital Cove, a quiet little valley on the north shore of the island, surrounded by precipitous hills, green all the year, and is a place of great natural beauty. It is well sheltered from the fogs and winds; is sufficiently distant from the city, and, aside from the swift currents of Raccoon Straits, which separate it from Marin County shore, is an ideal site for a quarantine station.

The equipment of the station can perhaps be best described by taking an instance when a large liner is detained for disinfection, and detention of her personnel for observation during the incubation period of the disease which causes her disinfection. The instant the quarantine officer decides it is necessary to hold her, the vessel weighs anchor and leaves the inspection ground for the hulk *Omaha*. Passengers and mail are handled first, and, as on the vessel, the personnel must be kept in the following groups: Cabin passengers (first and second), European steerage, Asiatics, and of these, Chinese and Japanese must be separated. The crew is separated in a similar manner. Passengers, with their baggage, are transferred by steamers to the station. Here they land upon a wharf 271 feet long, with an arm 104 feet; upon the wharf is a large building with two rooms. Gate, partitions and doors separate the whole north wharf building and grounds from the rest of the station, all persons going through bath houses, and effects through the disinfecting chambers before going to the barracks. In this north, or "infected" room, are small wire cages; each person is directed to divide his effects into two lots, one of goods not injured by steam, the rest for formal-

dehyde. Directions are printed upon the walls, and trained officers and attendants, including a female trained nurse for women, watch every process. The cages are now placed upon flat cars standing ready upon a track which makes a circuit from infected room through disinfecting chambers, to clean end of shed and wharf.

The disinfecting house is a large building, 92x54 feet, divided into two rooms by a tight partition; adjoining it are the boiler house and steerage dressing room, the whole having a cement floor. In this house, with one end of each projecting into the "clean" room, are three cylindrical, double jacketed chambers for the disinfection of clothing, mail, baggage, bedding, etc. Each chamber is forty feet long and seven feet in diameter, and all have steam supply and return pipes, gauges, safety valves, pressure regulators and thermometers which show the temperature of both jacket and interior. Each is connected so that either steam or formaldehyde may be used. Let us take the chamber containing bedding, etc., to be steamed. Steam is already circulating in the jacket and the chamber is warm; doors at either end are hermetically sealed, and a steam ejector in one minute makes a vacuum of fifteen inches in the huge chamber; the heat from the jacket soon warms the contents and live steam is now streamed into the chamber until a pressure of ten pounds is reached. After the thermometers have shown a temperature of 104° to 105° C. for not less than twenty minutes, the steam is turned off and a vacuum is again created, the hot jacket soon drying the contents of the chamber. Air is now turned in and the contents removed by opening the clean end, out of which the cars run on to a turn table, thence to be repacked. In the case of trunks, pictures, fine silks, leather goods, etc., a vacuum of 15 inches is made, as in the case of steam, and held until the thermometer shows a temperature of 60° C., when formaldehyde gas, evolved from a mixture of neutral salt and formalin, in an autoclave, under pressure, using not less than 30 ounces of formalin (40%) to the 1000 cubic feet, is injected. After a total exposure of one hour, the vacuum is made.

Having sorted their clothes, passengers are now conducted to the steerage or cabin baths. In the former every particle of effects is left in the disrobing room, whence it goes to the cars under supervision of attendants; each person is given soap and towel and after a warm shower bath of fresh or salt, or bichloride of mercury water, and inspection while nude by a medical officer, goes through another room where he is given a suit of clothes and slippers which he wears while waiting for his disinfected clothes.

Cabin passengers have a house containing waiting rooms with open fires, etc., at either end.

Each person goes into a little disrobing room, thence into a small shower bathroom, where, after a bath, he is furnished bath robe and slippers, and then waits in the clean end. The sexes are kept separate and a trained nurse is with women and children.

Each person landed having now been separated from the source of infection, whether it be the vessel, the sick, his own clothes or personal effects, and all that he has being "clean," the problem of taking care of the personnel for observation during the incubation period of the disease remains.

Along the walk from the clean end of the wharves and disinfecting sheds are two long buildings with bunks which will accommodate 576 Chinese steerage; behind them are lavatory and trough toilets, and nearby is a Chinese "kitchen." Surrounding this compound is an eight foot barbed wire fence. Passing a gate we come to a large one-story building with kitchen and dining room in front and behind, two large rooms separated by a hall, each with toilet. Upon canvas bottom cots in tiers, are standees for 176 Japanese steerage, one room for each sex. A barbed wire fence and solid partitions on verandas, make this another compound.

Next is a similar building, the front of which is used as executive offices, dispensary and quarters for a trained nurse; behind these are two rooms with hospital beds and tables, with two well-equipped bathrooms. These rooms accommodate about twenty-six people and are for ordinary cases of illness during detention, but on account of lack of room, are sometimes used for cabin passengers.

Next along the water front is the new building for cabin passengers. This is a T-shaped, two-story building. The long arm has verandas upon which open a series of staterooms each with two berths of hair mattresses over wire springs, lavatory with running water, electric lights, mirror, folding table and hot water heat. Ample toilet and bath facilities are provided for each sex. In the first floor of the transverse arm are a large dining room, kitchen with ranges, etc., and above are seven rooms. This building accommodates about sixty-eight persons. Still further to the west along the shore, we come to another "compound" containing two connected houses, one of which is used for detention of ships' and customs officers or passengers, the other for attendants. There are accommodations for thirty-six people here. So much for the well; but before any of this is done, the sick are removed from the vessels.

For the isolation and treatment of contagious diseases there are two groups of buildings, each with an eight foot wire fence forming a "compound," separated from each other and from

the rest of the station; each is, in fact, a sub-station. One compound is upon the bluff at the extreme northeast point of the station, seventy-five feet above water. One building contains a ward, three rooms, bath and toilet and hall with kitchen beneath; the other building has two rooms and toilets for medical officer and nurse.

There are telephone and electric lights from the station, and hot water heat. In a beautiful little cove, several hundred feet to the east, accessible by water, is a similar "isolation compound" of three buildings. On the east side of the island is a large detention camp, used for overflow crowds of troops, etc.

The wisdom of having isolation facilities for more than one disease is evident, because all have been in use simultaneously twice within the past three months.

On a hill above the Oriental barracks, are two one-room observation buildings, each isolated by wire.

If, during the inspections given detained passengers, any suspicious case is detected, it is removed to these buildings, thence to the non-contagious or isolation hospitals, as may be. Nearby is a laboratory building, well equipped for diagnosis, the room for infected animals being concrete. In a distant building are kept healthy guinea pigs, rats and pigeons for diagnostic purposes. Under the isolation hospital bluff, next a separate landing, is a brick oil-consuming crematory for bodies dead of quarantinable disease. Toward the main group is a corrugated iron building containing the electric light plant, which, with its two dynamos, direct and storage batteries systems, runs the arc and incandescent lights over wharves, buildings and grounds.

Nearby are the animal house, machine, carpenter, paint and smith shops. Behind the executive building is a completely equipped steam laundry. Fire protection is afforded by two pumps which throw sea water to tanks 275 feet above the station, thence by gravity through a system of pipes the water is distributed to water plugs. Fire drill is required by regulation at least once weekly.

The fresh water supply comes from a spring 285 feet above the station and from a 6-foot well sunk 75 feet to solid rock, with two thirty foot galleries. Water is pumped to these tanks, capacity 51,000 gallons, thence distributed by gravity, and the water shed and pump house are protected by eight-foot wire fences.

Suitable quarters for the commanding and junior officers are provided in three buildings upon the hill, back of the other buildings.

The total normal capacity of the station is 1104 persons, (steerage 816, cabin 102, isolation buildings 8, non-contagious hospitals 35, "small-

pox compound" 9, "cholera or plague compound" 4, *Omaha* 130,) exclusive of station force. Fifteen hundred to two thousand persons, with baggage, can be handled in one day.

The reservation is so arranged that a system of barbed wire fences segregates various groups; all important buildings are connected by telephones and the commanding officer's quarters have connection with the city telephone system.

After the infected vessel is moored alongside the *Omaha* and the sick passengers, mail, carpets, bedding and most of the crew removed, disinfection begins.

Regulations prescribe that, in general, holds of empty vessels shall be disinfected by (a) exposure for twenty-four hours to $S O_2$, generated by burning 5 lbs. of sulphur per 1000 cubic feet, or liberated from 10 lbs. of liquid $S O_2$, sufficient moisture being present; (b) washing with 1-1000 solution of bichloride of mercury; for iron vessels either, for wooden vessels both methods are prescribed.

When the disinfection is for yellow fever or plague, a preliminary simultaneous fumigation by moist $S O_2$ is done for the purpose of destroying rats, vermin or mosquitoes. In the disinfection of cargo vessels infected with plague, after twelve hours' exposure to $S O_2$, the upper six-foot layer of cargo is removed during the day; the hold again fumigated at night, this process being continued until the entire cargo is discharged.

Living apartments, cabins and fore-castle are disinfected by one of the following methods: (a) Sulphur dioxide 5%; (b) formaldehyde gas, using not less than ten ounces per 1000 cubic feet; (c) washing with bichloride of mercury 1-1000; formalin 5%, or carbolic acid 5%, preference being given to last for metals or polished woods. Fore-castles, steerage, and compartments in bad sanitary condition, are disinfected by (a) sulphur followed by (b) a solution.

Small vessels with empty holds are best disinfected by moist $S O_2$, generated by burning sulphur in open pots set between decks or elevated above the bottom, in larger pans of water. The disinfection of such sailing vessels is no more like the disinfection of a huge, complicated system of holds, bunkers, ballast tanks, ventilators and living apartments, such as a big liner, than incising a boil is like a difficult brain operation.

The use of liquid burning sulphur in small pots, closed in cargo holds containing valuable cargo, is of course out of the question.

Upon the disinfecting hulk *Omaha* are two double end furnaces, in which sulphur is burned, not less than $5\frac{1}{4}$ pounds per 1000 cubic feet to be disinfected. $S O_2$, the product of this combustion, is led through a pipe to an iron tank or reser-

voir, whence the gas is forced through a 12-inch iron pipe, along the side of the hulk. At short intervals are reducing elbows, to which are coupled 6-inch flexible rubber hose, the other end of which is led aboard the infected vessel, well down toward the bottom of the hold. A small pipe carries steam necessary for formation of moist gas, into the hold. Forecasts, storerooms and similar small accessible places, are disinfected by a solution of glychochloroformol under pressure in an autoclave or by sulphur pots. Before closing the vessel, careful search should be made for hidden articles of clothing and possible stowaways. Effects ("dunnage") have been found in furnaces not in use, under coal, in ventilators, wrapped in sails—in fact, everywhere—and they are likely to be the effects of the sick or dead. Stowaways may be anywhere. Effects of the crew, carpets, bedding, etc., not already sent for disinfection, are now disinfected in a 16-foot, double jacketed chamber on the hulk, similar to the large ones at the station.

After the fumigation, the disinfection solution is forced by steam pumps from the tanks on the hulk, through hose led aboard the vessel, and empty holds, forecasts, etc., cleaned under pressure. Staterooms and cabin must be gone over by hand. The vessel is now mechanically, and from a quarantine standpoint, clean; she is "free from danger of conveying quarantinable disease"; her owners are, therefore, given the privilege of placing a crew aboard and putting her in commission, her old crew being held for observation.

Not all vessels quarantined should be, or are, subjected to such disinfection throughout. A case of smallpox, for instance, breaking out a few days after embarkation, was clearly infected ashore. Cargo holds, several hundred feet away and battened water tight since, for instance, leaving Shanghai, could scarcely be infected by such a case embarking at Yokohama.

Here the quarantine officer must use his own judgment, uninfluenced by ignorant or malicious criticism, or by the natural desire of the vessel's owners to avoid delay and expense, or by an unreasonable desire to be absolutely sure of a perfectly aseptic vessel. It is his duty to disinfect, when reasonable doubt exists after careful consideration.

Important and interesting as equipments for disinfection, isolation and detention are, the crucial test of the work of a quarantine station is the inspection of incoming vessels. The laws provide that vessels arriving at ports of the United States under the following conditions, shall be inspected by a quarantine officer prior to entry: (a) All vessels from foreign ports; (b) any vessel with sickness on board; (c) vessels from domestic ports where cholera, plague or yellow fever prevails, or where smallpox or typhus fever prevails

in epidemic form; (d) vessels from ports suspected of infection with yellow fever, having entered a port north of the southern boundary of Maryland without disinfection, shall be subjected to a second inspection before entering any port south of said latitude during the quarantine season of such port.

Vessels arriving under the following conditions, shall be placed in quarantine: (a) With quarantinable disease on board, or having had such disease on board during the voyage; (b) any vessel which the quarantine officer considers infected; (c) relates to vessels from yellow fever ports during the open season, May 1st to November, arriving at ports south of Maryland, direct or via other ports.

The quarantinable diseases are cholera, yellow fever, smallpox, typhus fever, leprosy and plague. When vessels arrive with other communicable diseases, as scarlet fever or measles, local health authorities are notified.

Under the wise law of 1893, and the wise and broad minded administration of Surgeon-General Wyman, the inspection of vessels is now really begun at the port of departure. Any vessels clearing from a foreign port, for any place in the United States, must secure from the consular officer or from the medical officer, where such officer has been detailed by the President for that purpose, a bill of health, setting forth sanitary history and condition of said vessel, its cargo, passengers and crew. The President, in his discretion, is authorized to detail medical officers to serve in the office of the consul at any foreign port, for the purpose of furnishing information and making the inspections required before the giving of said bill of health.

Under this law, this service maintains medical officers at Calcutta, Hong Kong, Shanghai, Nagasaki, Kobe, and Yokohama; the quarantine officers at Manila and Honolulu acting in the same capacity. Such officers are directed to make such an examination of vessels, cargo, passengers, crew, personal effects of same, including manifests, food and water supply, the ascertainment of its relations with the shore, the manner of loading and possibilities of invasion by small animals, as will enable the quarantine officer here to determine if regulations have been complied with.

Steering passengers and forecastle crews are bathed, their effects disinfected, and their temperatures taken before embarkation. Manifests of freight, especially food products, hides, etc., must be certified as inspected and passed. The anchorage ground for vessels before inspection is between a line from Alcatraz Island to Meiggs' Wharf, and the Golden Gate.

Boarding is done by two medical officers stationed upon the boarding steamer *George M.*

Sternberg, as soon as a vessel flying a yellow flag anchors. When transports or large liners arrive, as well as in the case of suspected vessels, the quarantine officer, four junior medical officers and a female inspector, go aboard. Temperatures or glandular examinations, or both, are taken of the personnel of vessels from plague or yellow fever ports; freight manifests are examined, baggage of steerage is looked at for certificates of medical officers, the general condition of the vessel as to mechanical cleanliness gone into, and a careful examination made of the source of food and water supply, especially if from cholera ports; the report of the vessel's surgeon, the bill of health and anything else pertinent to the inquiry. In addition to this careful inspection of every person and thing for quarantine, the quarantine officer is charged with the medical inspection of aliens for the Immigration Bureau of the Department of Commerce and Labor, and, as neither this bureau nor the transportation companies provide any other place, this inspection is done aboard ship.

Opened April 29, 1891, the first vessel treated was the *China*, which arrived on December 20th, 1891, with smallpox on board. No sanitary inspection or disinfection of vessels was done by the Federal authorities, these being made by the city quarantine officer who was appointed by the Governor. Neither the State nor the city had any quarantine buildings or modern appliances, and the station was used as the national and local quarantine by the desire of the State and local boards of health.

In 1892 the fumigating steamer *George M. Sternberg* was completed. In 1895 the Legislature of the State passed a joint resolution requesting the Federal government to assume entire control of the maritime quarantine service at the port of San Francisco, meaning the inspection of vessels in addition to the quarantine functions already performed. The Chamber of Commerce of San Francisco passed similar resolutions, and the steamer *George M. Sternberg* was put into commission as boarding steamer.

May 11, 1897, the duty of medical inspection of immigrants was assumed, and after a disagreeable controversy between the local quarantine officer and the commanding officer of this station, the latter was appointed by the President by virtue of the power given him by Section 3, of the Act of February 15, 1893, quarantine officer at the port of San Francisco, California. The following officers have been in command of the station:

Surgeons Preston H. Bailhache, until June 13, 1891; W. P. McIntosh, June 13, 1891, until May 2, 1892; D. A. Carmichael, May 2, 1892, until April 16, 1894; Passed Assistant Surgeons, J. H.

Oakley, April 16, 1894, until June 8, 1894; C. T. Peckham, June 8, 1894, until March 2, 1896; M. J. Roseman, March 2, 1896, until December 6, 1898; Surgeon Brooks, December 6, 1898, until June 17, 1899; J. J. Kinyoun, June 17, 1899, until May 3, 1901; D. A. Carmichael, May 3, 1901, until January 2, 1902, when the writer became quarantine officer at the port of San Francisco.

A FEW ILLUSTRATIVE CASES OF DIPHTHERIA.*

By FRED GRANT BURROWS, A. M., M. D., San Francisco.

THE Board of Health of San Francisco has kept complete records of the cases of diphtheria that have occurred in that city since 1896. These records show that the disease is increasing; and that the greatest number of cases recorded in any one year occurred during the last fiscal year, 1901-1902. During that year there were 1357 cases with 204 deaths, or a death rate of 15%. During the six years covered by these records there were 4297 cases of diphtheria and 704 deaths, a death rate of 16.38%.

It is well known that both the morbidity and the mortality from diphtheria are universally greater during the cold winter months than during the summer. Under like conditions of treatment we should therefore expect more favorable results in this climate than in the severe climate of that part of the United States east of the Rocky Mountains. We have failed, however, to achieve as good results. The death rate from diphtheria is now greater in San Francisco than it is in New York, Boston or Chicago. Not only is this true, but the number of deaths is increasing here and decreasing there. There were more than three times as many deaths from diphtheria in San Francisco during the fiscal year 1901-1902 as there were during the year 1896-1897. Whereas the number of deaths from the same disease in the combined population of the five largest cities of the United States was considerably less in 1901 than it was in 1896. During 1901 there was one death from diphtheria in San Francisco for every 1680 of the living; and in the five cities above referred to there was only one death from the same disease for every 2,128 of the living.†

Statistics from all the large hospitals of Europe and the United States prove beyond any possibility of doubt that the death rate from diphtheria properly treated with antitoxin is very much less than it is from that disease treated without antitoxin.

†The combined population of New York, Chicago, Philadelphia, St. Louis and Boston in 1900 was 7,556,586; there were 3355 deaths from diphtheria in those cities in 1901. San Francisco had a population of 342,782 in 1900 and there were 204 deaths from diphtheria in that city during the fiscal year 1901-1902.

*Read at the Thirty-third Annual Meeting of State Society, Santa Barbara, April 21-23, 1903.

The hospital death rate before antitoxin was used was over 45%. It has now been reduced in most large hospitals to less than 15%. It is known that diphtheria is caused by a specific organism which during its life processes eliminates a virulent toxin. This toxin is taken up by the blood and distributed throughout the body, where it produces poisonous and destructive effects. It is also known that this toxin is non-selective in action and may poison any tissue or destroy any organ; and that the general symptoms of the disease are due to the virulence of the toxin. Laboratory tests and clinical observations have proven that antitoxin has the power of completely neutralizing this toxin; but in order to save the tissues of the body from the destructive action of the toxin it must be neutralized early. In the treatment of diphtheria, therefore, the first aim of the physician should be to neutralize this toxin at the earliest possible moment. Abundant clinical experience has shown that antitoxin never produces harmful effects, and that it may be given in any amount. A single dose may be 6,000 units or 8,000 units. The paralysis, heart complications and albuminuria sometimes seen in those cases recovering after the use of antitoxin are not due to the antitoxin, but to the toxin that was not neutralized before it had time to injure the tissues.

I believe that under ideal condition it would be possible to save 99% of patients with uncomplicated diphtheria. The present contagious diseases department of the Boston City Hospital was opened in 1895. During the first five years of the existence of that department, more than 7,000 patients with diphtheria were treated in the wards, and more than 100 nurses, physicians and employees of the department contracted the disease. The infections of these hospital attaches were usually severe, but they all recovered, and they all recovered because they were treated at the very beginning of the disease with sufficient antitoxin. One hundred per cent of that series of more than 100 cases were saved. In the same hospital, in a much smaller department, 1,421 diphtheria patients were treated during the four years immediately preceding the advent of antitoxin, and two physicians, two nurses, and one orderly died from the disease contracted from these patients. Let me state these facts in another way. In a given hospital during a period of four years, only 1,421 cases of diphtheria were treated, and five members of the hospital staff died from the disease contracted from these patients. During another period of five years more than 7,000 cases of diphtheria were treated; and although many members of the staff contracted the disease, not one of them died. The only essential difference in the treatment of the members of the staff

during these two periods was in the use of antitoxin during the second period.

Our knowledge of the effects of antitoxin and the proper methods of using it has been a matter of growth. The history of several attacks of diphtheria from which an orderly in the hospital above referred to suffered, will illustrate this point and seems convincing evidence.

Case 1, W. J. C.—An orderly in the diphtheretic wards. His first attack occurred Jan. 1899. He was given 2,000 unit doses antitoxin and received 37,000 units in 120 hours. He was sick in the hospital thirty days, but made a good recovery. His second attack occurred March, 1900. He was given 4,000 unit doses antitoxin and received 16,000 units in 48 hours. He was in the hospital four days, and made a good recovery. His third attack occurred in July, 1900. He was given two 5,000 unit doses early and was not really sick at all. He had learned from experience to recognize his symptoms early, and we had learned from experience to give antitoxin early and in large doses.

The history of an attack of diphtheria from which one of the house physicians of the above hospital suffered shows the results that may be obtained by early and vigorous use of antitoxin.

Case 2, Dr. A.—On duty in the diphtheria wards. On Dec. 5, 1899 his throat felt slightly sore. The next morning it was a little worse and there was a small patch of diphtheretic membrane on one tonsil. A diagnosis of diphtheria was made and 4,000 units antitoxin given. At noon the patch was thicker and larger and the dose of antitoxin was repeated. By 6 P.M. the membrane had not begun to disappear and another 4,000 units of antitoxin was given. The throat was again examined at 11 P. M. and the false membrane did not seem to have grown larger. It was therefore thought that no more antitoxin would be needed. The next morning, however, it was found that the patch had enlarged and thickened; there was also a patch on the other tonsil and a film on the uvula. It was decided to give more antitoxin, and 4,000 units were given at 8 A. M. At noon of that day (the second of the disease) the throat looked much as it had in the morning, so another 4,000 units of antitoxin were given. By evening the throat seemed to be clearing. We were not willing to take any chances, so gave 4,000 units more. The patient had thus received 24,000 units in 36 hours. On the following day the throat cleared rapidly, became entirely clear on the fourth day of the disease, and the patient made a rapid and uneventful recovery. His temperature was never above 100°; his urine never contained albumen; his heart was not affected; and there was no post-diphtheretic paralysis.

This patient was a physician who had a severe infection contracted from his diphtheretic patients. In spite of large initial doses of antitoxin the disease spread rapidly, but was quickly controlled when sufficient antitoxin had been given to neutralize the toxin and render the conditions unfavorable for further growth and development of the diphtheria bacilli. There were no complications because the toxin was neutralized early, before it had time to affect the tissues. There were no severe constitutional disturbances

because the toxin was neutralized as it was produced. The patient was absent from duty only thirteen days, and was in the ward as a patient only ten days.

Another patient seen in private practice illustrates the advantages of early antitoxin treatment

Case 3—A child between two and three years old was seen in consultation in the evening of Dec. 8, 1902. The patient was first seen by the family physician at 11 P. M. the day before, and the history was that he had then been croupy about 24 hours; that is he had been croupy 48 hours when I saw him. I was called to perform intubation as the child had considerable dyspnea and was rapidly growing worse. He had already been given 3,000 units antitoxin. An examination showed that there was no nasal nor faucal diphtheria, but considerable laryngeal stenosis, with paroxysms of coughing during which the dyspnea and cyanosis became marked. Phonation was still possible and the dyspnea was not extreme. Considering the dangers of accidents to an intubated patient situated as he was, it was decided to give more antitoxin and if possible avoid the operation. We gave 3,000 units then and visited him again at midnight prepared to operate if necessary. We found however that he was considerably better and had been sleeping quietly. He was again given 3,000 units of antitoxin and the expectant treatment continued. I did not see him again, but his physician reported him much better the next morning. In the afternoon, however, returning stenosis demanded more antitoxin and 2,000 units were given. From that time he made a rapid recovery. There is no doubt in the mind of this patient's physician or myself that with less vigorous antitoxin treatment, intubation with all its dangers and responsibilities would have been necessary.

Only those who have had actual experience with such cases can appreciate the difficulties of properly caring for intubation patients outside of a hospital. San Francisco, unfortunately, has no hospital properly equipped for their treatment.

Another patient from the hospital series illustrates what may sometimes be accomplished in the treatment of late and neglected cases:

Case 4, E. L.—A slender, frail young man, 18 years old, was admitted to the Boston City Hospital Dec. 8, 1899. He had been ill with diphtheria six days and had had no antitoxin. He was delirious and greatly prostrated. His pulse was soft, irregular and intermittent. His heart was dilated and there was a well marked systolic murmur heard over the greater part of the precordia. A thick diphtheretic membrane completely covered the tonsils, uvula, and soft palate, and extended onto the hard palate. There was an abundant dark, glairy, serous discharge from the nose, and diphtheretic membrane could be seen extending to the margins of both nostrils. The cervical glands were greatly enlarged, and the diphtheretic odor was so marked that a diagnosis could have been made in the dark. The patient seemed in an exceedingly critical condition, and it was not thought possible for him to live until morning. Up to this time 4,000 unit doses were the largest ever given in the hospital and, so far as I knew, the largest ever given anywhere. As this was a desperate case—such as was never known to recover without antitoxin—and as my experience with large doses of antitoxin had led me to believe thoroughly in such treatment, we gave him 6,000 units as an initial dose. He began to improve and was given 6,000 units every four hours

until he had received 84,000 units—all in 78 hours. At the time of admission to the hospital he was delirious and refused to swallow. He was therefore fed and stimulated by rectum. He expelled his enemata, and it was necessary to compel him to retain them by applying an anal pad in such a way as to render this impossible. This method of alimentation had to be continued for three days. On the seventh day in the hospital, or the thirteenth day of the disease, the patient suffered from one of those attacks of extreme weakness or collapse so frequently seen in severe cases of diphtheria. Vigorous subcutaneous stimulation revived him and he continued to improve. At the time of admission to the hospital his urine contained albumen; but this disappeared in a couple of weeks and the patient was discharged well after 35 days in the hospital. I have not seen a patient more seriously ill from any disease, recover. His history seems to justify the opinion that it is never too late to give antitoxin, and that large doses should be given in severe cases. It also demonstrates the well-established fact that the cardiac disturbances and albuminuria are due to the toxin of diphtheria, for they were present before antitoxin was given.

The two following cases are of unusual interest and illustrate several points:

Case 5, N. C.—On Jan. 29, 1902, I was called to the home of a physician to see his child, a boy of five years of age. I was told that the child had been croupy three days, and had grown steadily worse. I found him suffering from marked laryngeal stenosis. There was great dyspnea, considerable cyanosis and profuse perspiration. The child was aphonic, and had frequent attacks of coughing, the cough being brassy and paroxysmal in character. Respiratory effects caused retraction of the substernal and supraclavical spaces, and marked dilatation of the alae of the nose. In short, the respiratory efforts presented an exaggerated picture of those of an athlete after severe and prolonged exertion. No diphtheretic membrane could be seen in the throat or nose, and there was no nasal obstruction. As diphtheria laryngitis is the only disease of childhood leading to a gradual stenosis, a diagnosis of diphtheria was made, and as suffocation was imminent the child was intubated. The insertion of the tube afforded instant and complete relief. The breathing became easy, all the above symptoms disappeared and the child went to sleep. As he lay sleeping he seemed in perfect health, but the sad experience of the many physicians who treated diphtheria before 1894 warned us that without further treatment he would probably soon awake to the agonies of suffocation, and that his chances of ultimate recovery were less than thirteen in a hundred. The subsequent history of the patient proved these chances to have been practically nil. We therefore began antitoxin treatment and gave him his first dose at 3 P. M. He received 3,000 units at 3 P. M., 3,000 units at 9 P. M., 3,000 units at 2 A. M. the next day, and 3,000 units at 8 A. M. At 9:45 A. M. the second day, Jan. 30th., his laryngeal tube became occluded and had to be removed. As he had difficulty in breathing without the tube it was again inserted, but gave no relief, so was at once removed, after which a membranous cast of the upper part of the trachea was coughed up. The patient then breathed freely without the tube and no more antitoxin was given until the evening, when returning dyspnea showed that the diphtheretic process was extending. It also showed that we had stopped giving antitoxin too soon. We now resumed the antitoxin treatment, and 3,000 units were given at 7:30 P. M. As the patient did not im-

prove, the dose was repeated at 11 P. M. and at 3 A. M. Jan. 31. By 6:30 A. M. the dyspnea became so great that the tube was again inserted. The insertion of the tube loosened more diphtheretic membrane from the air passages, which was coughed up. When the tube was again inserted the breathing was unimpeded. This second cast was very extensive, including part of the trachea, both primary bronchi and many secondary bronchi. On one side of the cast ten branches from as many small bronchi can be seen. This membrane showed that the inflammatory process had extended into the very center of the lungs. It also warned us that still more antitoxin was needed. He had already received seven 3,000 unit doses of antitoxin, which had caused the false membrane covering the mucosa of the air passages to be thrown off. We knew the mucosa of the air passages was inflamed. We knew that this inflamed mucosa was infected with thousands of the bacilli of diphtheria. We also knew that the conditions in this inflamed mucosa of the air passages was favorable for the growth and multiplication of the bacilli.

We determined if possible to neutralize the toxin that would be produced in their growth. Therefore we gave more antitoxin. We gave 3,000 units at 6:30 A. M., 3,000 units at 10:30 A. M., 3,000 units at 2:30 P. M., 3,000 units at 5:30 P. M., and 3,000 units at 9:30 P. M. That is to say, although he had already received 21,000 units, this five-year old child was given 18,000 more units of antitoxin in eighteen hours. At 4:30 P. M. of that same day, Jan. 31st., the laryngeal tube again became acclued and had to be removed, after which a piece of false membrane, evidently from part of the trachea, was coughed up. The patient then breathed easily and went without the tube until 7:30 A. M. the next day, Feb. 1st., when it was again needed, this time on account of swelling and edema of the larynx. The tube was now worn until 9:30 P. M. of the same day, when it had to be removed on account of partial acclusion with dry mucus. The patient then went without the tube for fifteen hours, when it was again demanded, at 12:30 noon, Feb. 2d., for the last time. It was finally removed at 7:45 P. M. Feb. 4th., or a little more than six days after it was first removed.

The last dose of antitoxin I have told you of was given at 9:30 P. M. Jan. 31st., by which time the patient had received 36,000 units. For reasons above given we were afraid to stop there and continued the treatment. On Feb. 1st. the patient was given four more doses of 3,000 units each at 2:15 A. M., 8 A. M., 12 noon, and 3 P. M. That is, we gave antitoxin until the character of the pulse, respiration and bronchial secretions indicated that no more was needed. To recapitulate. This five-year-old child was given 48,000 units antitoxin in 72 hours. He was intubed six times, and the tube was removed with the extractor three times; each of these nine operations was imperatively demanded. During this entire illness the temperature was never above 100, and was for the greater part of the time normal. The pulse was usually about 120, but during the night of Jan. 30th., when the diphtheretic process was so rapidly extending into the lungs, it was in the neighborhood of 140 and was an important indication for more antitoxin. The urine contained a slight trace of albumen for one or two days only. During the time the laryngeal tube was worn, the patient was not allowed to swallow food nor drink, but was fed by esophageal tube and by rectum. He was fed partially by rectum because the esophageal tube caused some vomiting. All rectal feedings were

retained and assimilated. There were absolutely no complications and the recovery was rapid and uninterrupted.

This child had been critically ill. He had been in imminent danger of suffocation and in imminent danger from the virulent toxin of diphtheria. If there is any other disease of childhood that may cause a similar inflammatory condition of the air passages and lungs from which the patient will recover, I have yet to learn of that disease. If one patient ever recovered from such a diphtheretic infection without the use of antitoxin, his history has not been published.

Case 6, M. C.—The child whose history I have just read has a sister two years his senior. She was then seven years old. She was said to have had a cold for a week or two before I saw her brother, and the cold was thought peculiar inasmuch as the nasal discharge seemed to come from only one nostril. An examination showed a pale, delicate-looking child with a rapid pulse and a considerable dark, glairy, serous discharge from one nostril. Further examination showed that nasal cavity to contain a small piece of diphtheretic membrane. Cultures taken from the nose gave an abundant growth of diphtheria bacilli. The patient was given 3,000 units antitoxin and made a good recovery. She had not been considered ill, but had had this nasal discharge for a week or ten days. There is no doubt that her brother contracted the disease from her. Her infection was a comparatively mild one of the nasal type, and she had been running about in a physician's family with the disease unrecognized. The association of these two cases emphasizes the importance of recognizing the mild cases, and especially the cases of nasal diphtheria. Although hers was, so far as it had gone, a mild case, her brother contracted a most malignant form of the disease from her. She might have recovered without treatment, but the disease might have lighted up at any time and proved fatal; or she might have continued with the nasal discharge for weeks or months and infected scores of other children. These two cases are of unusual importance, for aside from the fact that they are of medical interest the patients are the children of an eminent physician. Their father is an authority on some medical subjects, but he no longer treats children's diseases and some of the recent literature on diphtheria had escaped his attention. He said he had never seen a case of nasal diphtheria to recognize it as such, and he thought his boy had a bad cold and acute laryngitis.

I wish to emphasize the fact that nasal diphtheria is a common form of the disease. A single unrecognized case of nasal diphtheria may be the source of a severe epidemic. This is especially true among school children, and inmates of orphanages and children's homes. I also wish to emphasize the fact that the most severe form of the disease may be contracted from a so-called mild attack.

I wish further to emphasize the fact that progressive laryngeal stenosis in children is always caused by a diphtheretic inflammation of the larynx. So-called membranous croup is always diphtheria. Spasmodic croup or acute laryngitis is a disease of sudden onset. It is usually accompanied by considerable fever and the pulse is

not disproportionately accelerated. The symptom complex is entirely different.

I have presented a detailed account of these few cases of diphtheria hoping to show the importance of early and vigorous antitoxin treatment. I have also tried to show the importance of recognizing the nasal type of the disease. It is possible to have an infection of the anterior nasal cavity run a long and subacute course. Such patients are a menace to the health of the community, and should be promptly isolated and treated.

In the treatment of the disease, I have considered only the use of antitoxin. If the toxin is neutralized as it is produced, there remains but little to do. The value of alcoholic stimulation in severe and neglected cases is so universally recognized that further emphasis seems unnecessary. Local treatment I believe to be worse than useless. The exhibition of antiseptics and corrosives usually results in larger areas of ex-coriated mucosa, which are promptly invaded by the bacteria of the disease. Moreover, the tissues of an individual suffering from diphtheretic intoxication are not in a condition to withstand the strain put upon them by the resistive efforts usually put forth against local applications.

I have shown that the present death rate from diphtheria is greater in California than elsewhere. This high death rate cannot be attributed to our climate nor to the unsanitary condition of our cities. Our climate is mild; our cities are not overcrowded; and there is no extreme poverty in our midst.

It is our duty to lower this high death rate. We can do it by recognizing the disease early in each infected individual, isolating each patient and giving antitoxin freely. Let me beg you to accept this responsibility. Give antitoxin early. Give it in large doses. Repeat the doses often. Do not stop giving antitoxin until the toxin of the disease is completely neutralized.

DISCUSSION.

Dr. Geo. L. Cole, Los Angeles—The cases which Dr. Burrows reported were exceedingly interesting. We should be guided somewhat by the symptoms and not alone by the pathologist's report. I wish also to emphasize the early use of antitoxin. My own faith in antitoxin and my ideas regarding the late use of it have changed within the last few years. There is no question about the efficacy of large doses; but after the 5th or 6th day I question whether we do get as much good as we expected. One very interesting thing with regard to the increased diphtheria rate in San Francisco, it has grown more rapidly in the last 3 or 4 years than it did for 5 years previously. This has been noticed in Los Angeles. In San Francisco you have been turning up streets and doing other city work. In Los Angeles several years ago, when growth was rapid and in that portion where there was constant grading and turning up of the earth, diphtheria was pretty abundant. In talking

to Dr. Powers he said that after every very severe windstorm, lasting a couple of days, he had noticed there was an increase in the number of cases of diphtheria. The winds coming down from the mountains were followed with excessive diphtheria. If I were to take exception to any one thing, it would be that local treatment was worse than useless. I cannot think this. I agree with him that in small children where, to make local treatment you have a struggle with the child, this is true; but I do not believe when we consider the possibilities of our antitoxin in some cases that we are justified in leaving off all local treatment. Another thing has occurred to me recently which I wish to emphasize. We know that the manufacturers put up large batches of antitoxin and if it does not quite come up to the standard, and they are a little short, will they absolutely destroy this antitoxin? Is it not possible that this antitoxin may be insufficient in some way? Therefore it has occurred to me that instead of going back to the same antitoxin, I should get another lot. There is one more point with regard to the feeling that I know exists in the profession, that all cases of diphtheria can be cured. I believe there are some cases of diphtheria that will die in spite of all antitoxin. I knew of a case recently where a woman had lost her only child. Her heart was broken. She went into a distant city and someone asked her why she was dressed in black. She said she had lost a child with diphtheria. The physician told her there was no need for the child to have died with the proper doses of antitoxin. We should never say that all cases of diphtheria can be cured. Give a child very large doses of antitoxin under the best of circumstances and sooner or later there will be recorded cases which it was impossible to cure.

Dr. J. Henry Barbat, San Francisco—It is pretty gratifying to hear these papers on diphtheria and on antitoxin. In 1892 I read a paper on this subject and I stated my belief that we would shortly be treating diphtheria with antitoxin. There was no attention paid to it. Dr. Cole has not expressed the reason for the increased mortality rate of diphtheria in San Francisco. The reason is that the so-called family doctor, the man who has no time to attend to medical meetings, cannot read his journal, does not know anything new, hears somebody talk about antitoxin, and thinks he will try a little antitoxin; he gives 500 units to a child who needs 10,000 and the next day the child dies. They are the men who treat the large majority of sick children in San Francisco and possibly in Los Angeles. That is something we do not know how to get around. They will have to die out; I do not see any other remedy.

Dr. George H. Evans, San Francisco—It seems to me that there are two points of major importance. They are the recognition of diphtheria and the administration of sufficiently large doses of antitoxin to cure the disease. I have had some little experience in this disease for a period of 12 years and have had occasion to compile statistics from boards of health. I presented the report of a number of cases which I culled from S. F. Board of Health statistics. There were a number of cases in which the mortality rate was a little less than 13% and I also remember this fact that in every fatal case the patient had either been found moribund or antitoxin had been given in ridiculously small doses. One case was of the laryngeal type and only 500 units of antitoxin had been given. We must give this fearlessly. I do not agree with Dr. Maher in giving such small doses. Dr. Burrows will bear me out in this matter. As evidence of the fact that these small doses are insufficient I would

like to bring up an illustration. Last week I was called in to see a patient early in the evening. I found the child had been to Sunday school that morning, had complained of not being well for 2 or 3 days, had come home that day and had developed a high temperature with delirium, swelling of the neck, and for the first time complained of sore throat. I found a child of nine years of age with both tonsils and a portion of the anterior pillars of the fauces covered with a membrane. That child immediately received 3000 units of antitoxin. As the child was nauseated no other treatment was given. I saw the child the next morning, and while the dose had spread the membrane and had been sufficient to prevent death, the child was still markedly toxemic. I immediately administered 6000 units more and that afternoon convalescence had commenced. It is a difficult matter to get at the proper dose of this drug.

Dr. J. Maher, Oakland—If there is anything which Dr. Burrow's paper emphasizes in particular it is the importance of meeting the toxins with antitoxin in sufficient quantity to neutralize them. That is what his paper has proven beyond all other things. I have in my paper confined myself to established facts. When we get enough of such experiments as Dr. Burrow's, then we can establish them as facts. I go a long way in agreeing with him in regard to the dose. I do not mean to say when I mention 1500 units that we begin all cases with that amount. I was simply making reference to the broad range that we have in the different cases. I have used myself 2500 or 3000 units with very young children. In some cases I have used 5000 or 6000 at the first dose. I think that one generally accepted fact is that after the administration of antitoxin, local treatment should not be abandoned.

Dr. Burrows—I lived 2 years in a diphtheria hospital in New York and we had 250 cases most of the time. I never had it and never took any antitoxin. I was a youngster and gave very large doses although many critics said that they would kill the patient. I do not believe in giving large doses to everybody. If one dose is sufficient, all right, otherwise give another. In ideal conditions in uncomplicated cases, 99% of patients can be saved. Patients do not get antitoxin early enough. Sometimes the onset is exceedingly quick. Not all of the increased death rate can be attributed to the practitioner. In the case reported, this physician's boy almost died. He was sick three days before he recognized it. I once had a case of a child of a physician and I lived 6 days and 6 nights under the same roof, treating and watching that child. The father objected to giving any more antitoxin than was necessary, and asked if it were necessary every time a dose was given. We should try to neutralize the toxin. As far as pseudodiphtheria is concerned, I do not know anything about it. All cases which have membranes covering the throat I call diphtheria and I treat them as such. If there is a thick membrane this may contain millions of bacteria. The mucosa underneath may contain as many, but the swab does not remove them. In diphtheric inflammation you find that the chronic process extends for a considerable distance into the mucosa. As Dr. Barbat said, we often meet doctors who know nothing about antitoxin or its use.

The Colorado State Medical Society is considering the establishment of its own journal, to take the place of the annual volume of Transactions it has hitherto published. At its last meeting the publication in journal form was strongly advocated; and a committee has been appointed to submit plans and estimates for such a journal at the meeting of the Society to be held October 6 and 7, 1903.

ABDOMINAL DRAINAGE.*

By STANLEY STILLMAN, M. D., San Francisco.

THE present paper is presented not because the writer has any new theories to advance on the subject of abdominal drainage, but because the general views and practice regarding it have changed so greatly in the past few years, that it seems well to submit it to you for consideration and discussion. It is my intention, and I consider it my duty, to contribute to the subject the results of my own experience, which if not great, has been varied and may add something to the weight of authority which is accumulating on this subject. There is not time to present anything like a complete history and review of the subject in the limits of the present paper, and I shall not burden you with statistics, though at some future time I may consider it my duty to do so.

As late as seven or eight years ago it was the custom to use drainage in the great majority of cases after intraabdominal operations, and the rule was, whenever in doubt, to use drainage. The general indications were: *First*, any soiling of the peritoneum from rupture of pus tubes or cysts; *Second*, oozing from raw surfaces; *Third*, after most cases of intestinal suture; *Fourth*, when there was persistent capillary bleeding or when secondary hemorrhage was feared, particularly when large pedicles were tied with the Staffordshire knot, then in vogue; *Fifth*, in cases of tubercular peritonitis; *Sixth*, in diffuse peritonitis, septic or otherwise, on general principles, as applied to any wound the lips of which were closed.

It was known that the peritoneum was capable of absorbing immense quantities of fluids, and that it was able to manage, and finally dispose of, considerable sized masses of aseptic substances; but it was not known, and still is not by many, that if its function and vitality be not interfered with, it is capable of managing and disposing of considerable quantities of septic fluid also, as has been repeatedly observed clinically and proved experimentally. Of course, the variety and virulence of the micro-organism has much to do with this. There are many cases of peritonitis that are rapidly fatal; but many more will recover if not drained than if they are. Of this, I shall speak more fully later on. I would like to consider these indications for drainage in order, and speak finally of its use when peritonitis is already more or less advanced.

First, let us consider those cases in which there has been actual soiling of more or less of the peritoneum by fluids from cysts, old pus tubes, etc. In the first place, the contents of these pus tubes is almost always sterile. For the past five years I have had cultures and cover glass preparations made of all such fluids, and while often micro-

*Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

organisms are present in the cover-glass preparation, they very seldom show any growth on the common culture media. Formerly I always drained such cases. Now, by careful protection of the surrounding parts with abundance of gauze before attempting the removal of a diseased tube, I am not disturbed should it be ruptured, nor do I now take the time and pains to avoid such rupture, as I used to, fearing more the shock to the patient and damage to the peritoneum from prolonged exposure and handling, than the danger of infection from the contents of the tube or cyst. Should such soiling have occurred, I carefully remove the fluid with sponges, mop the surface off thoroughly with salt solution, and proceed as though the rupture had not occurred, finally closing without drainage. I avoid antiseptic solutions on account of their effect on the endothelium of the peritoneum, and a drain for reasons hereafter to be mentioned. What I am particular about is the careful removal of all blood clots and particles and shreds of devitalized tissue, the arrest of oozing, with temporary packing and the papuelin if necessary, and the covering of raw surfaces with omentum before closing; and I am not afraid that the omentum or the uninjured surface of the intestines will handle any infection that may be present. Should the case be one of an acute type, (and I am very loath to operate in that stage, by the way) the danger is vastly greater, and of course the greater, the more virulent the organism; but the peritoneum will handle the infection better than will the drain.

Second—So far as oozing from raw surface is concerned, it can be stopped by temporary packing or the cautery, in most cases, and if it continues is less to be feared without drainage than with it; for while the drain will stop oozing, infection is apt to follow its track, particularly if much bleeding follows its removal, as is often the case.

Third—As to the third indication, I think that very few surgeons to-day think of using drainage through fear of secondary hemorrhage. With proper technique in the matter of ligating, and if all raw surfaces in the broad ligaments, mesentery and elsewhere are covered by suturing the peritoneum properly over them, there need never be a drain used.

Fourth—After intestinal suturing the drain should never be employed, except in those cases where the suturing is known to be faulty and unsatisfactory, and is expected to give way, in which case the use of a drain is imperative. I do not recall having lost a case of intestinal suturing from peritonitis since I stopped using drainage afterwards, about five years ago. Previously I usually inserted a gauze drain and generally lost my patient between the sixth and the eighth day. Naturally an improved technique has had some-

thing to do with this as well as the omission of the drain. Still, I abandoned the drain because of my conviction that it was due to its use that infection occurred in several cases, and that leakage occurred in others due to its removal, and since ceasing to use it in these cases, I have not, as I have said, lost a patient from leakage or infection at the point of suture.

Fifth—As regards tubercular peritonitis, I have also ceased to use the drain in these cases. The old idea was to starve the process by continuous drainage. The present idea is the admission of air, (that is, oxygen), as well as the removal of the fluid. I have had persistent tubercular fistulæ and hernias follow operation in the cases I drained, after the patients were well of the tubercular peritonitis. When I finally had a case of fatal septic peritonitis supervene six weeks after the drain was removed, I ceased using it in these cases altogether, and the results have been better, for the patients have all recovered, so far as I am aware, though in one case I opened the abdomen three times, and there has been no return of the symptoms after a year and a half. From the foregoing, it may be seen that of these five conditions that were considered indications for drainage six or eight years ago, not one of them is considered, in my own practice, sufficient to call for the insertion of a drain of any form into the abdominal cavity, and my judgment is that those patients who recovered when drainage was used, recovered in spite of the drain, and not because of it. The objections to the drain are many and obvious to all. Briefly, the drain almost invariably becomes infected before removal, and through it micro-organisms reach blood clots and devitalized shreds of tissue, or fluids, that were previously sterile. Owing to the damage done by its removal, infection may extend with fatal consequences, as has happened in my experience, in cases that were originally clean; without commenting on delayed healing, prolonged suppuration or secondary hemorrhage, cause not prevented, by the drain. When any general soiling or infection of the peritoneum has occurred, drainage is absolutely useless, because, as a drain, its function ceases in a few hours in consequence of the formation of lymph around it, which the irritation of its presence causes.

But the great overruling, all important objection is, that the idea is all wrong. The idea that the peritoneal cavity can be drained, as the pleural cavity or the knee-joint can be, is wrong anatomically and impossible practically, no matter how many or what kinds of drains be inserted, and more than that, the principle is wrong physiologically as pointed out by Clark, in Vol. VII, *John Hopkins Hosp. Reports and University of Pennsylvania Med. Bulletin*, Nov. 1901. Its application interferes seriously with the function

the normal peritoneum has of draining itself, and protecting itself and the general system, even when very considerable quantities of septic fluids and organisms are injected into it.

Sixth—Coming finally to cases in which infection has actually occurred and local or general peritonitis is present, we will consider first, localized conditions. In all localized walled-off collections of pus within the abdomen, I use a drain after carefully evacuating and washing out the abscess. In these cases the wall of lymph around the collection prevents infection of the general peritoneum and equally prevents the general peritoneum from acting physiologically, hence these abscesses are to be treated as any other abscesses. If sufficient skill and patience be used, their contents may be evacuated without soiling either the wound or the surrounding intestines. The drain may often be brought out through the vagina, rectum or flank in such a way that the original abdominal wound may be closed at once, after arranging the omentum over the opening that has been made between the abscess and the general peritoneal cavity. If this cannot be done, I employ a Mikulicz drain, filling the bottom of the bag which occupies the interior of the abscess pretty full with a long strip of gauze, but I leave as little as possible between the lips of the wound. The wound is closed quite tightly around the drain. The interior packing is partly removed after twenty-four hours and entirely after forty-eight hours. The bag is not removed until it is loosened by the suppuration and comes away without causing pain or bleeding, usually about the sixth or seventh day. Two rubber tubes, side by side, are inserted on its removal, and usually the opening in the wound is just sufficient to admit them. These of course, are rapidly shortened and removed. In the rectum the self-retaining T drain of rubber is used, and in the vagina either the same or a gauze drain in the form of a long strip. The gauze in all these cases is simple sterilized gauze. When a diseased organ, as the appendix, forms part of the wall of such an abscess, I do not generally remove it at the time of the opening of the abscess, unless the quantity of pus be small, although I am to a great extent guided in this by the character of pus and other circumstances attending each individual case.

The great danger of general septic peritonitis lies in the existence of a focus from which is furnished a continuous supply of organisms and toxins, and our first duty is to eliminate such a source of supply, whether it be a gangrenous or perforated intestine, an infected blood clot or an abscess in the abdominal wall communicating with the peritoneum. If the infection in these cases be a streptococcus infection, a rapidly fatal peritonitis is almost sure to occur, whatever is

done. The staphylococcus, either white or yellow, is also a very dangerous organism, but I have been surprised to find that they are rather infrequently met with in intraabdominal abscesses or fluids. The colon bacillus is, of course, most frequent, but the pneumococcus, often in pure culture, I have found very frequently. These latter germs are not so virulent, and I have seen a number of patients with general peritonitis in which they were present, recover. Now it is in cases in which general peritonitis has started, a greater or less area of peritoneum is reddened and thickened, and there is a considerable amount of fluid present in the pelvis, or diffused over the surface of the bowel, that the question of drainage is really to be considered. Formerly it was my practice to always drain such cases, frequently through several different incisions; but after finding from cultures that the fluid, often quite creamy, was generally sterile, I gradually dispensed with it and found that the patients recovered more surely, and with almost none of the distressing complications that so often attended the use of the drain.

A diseased appendix is by far the most frequent cause of septic peritonitis, which may start, as is known, without any perceptible perforation and receive constant additions of new organisms from the interior of the appendix. In cases of peritonitis following appendicitis, if on opening the abdomen I find the appendix free, or practically so, I remove it; then if the peritonitis has not progressed far, I close the abdomen without drainage, after wiping very gently the region where the appendix lay, and also the surrounding region, with sterile salt solution, or sometimes with weak carbolic solution. If there is, in addition to the commencing peritonitis, a mass of adhesions containing pus and the diseased appendix, I evacuate the abscess, and generally remove the appendix regardless of adhesions, for they have proved inadequate. The more or less abundant peritoneal fluid is removed with sponges, as gently but as thoroughly as possible, and if the abscess is large, and the peritonitis limited or moderate, I use a large gauze drain at the site of the abscess, as described above, leaving the general peritoneum to take care of itself. When there have been little or no adhesions formed, but there is extensive general peritonitis, or when the free fluid in the peritoneum has a distinctly foetid odor, I first remove the appendix and then wash out the abdominal cavity very thoroughly with warm salt solution, and use no drain, even at the site of the appendix, but close the abdomen tightly, trusting to the ability of the peritoneum to handle the diffuse infection in its own way; and I try to avoid embarrassing or impeding the natural drainage by

inserting masses of gauze, tubes, or anything else around which adhesions may form.

The limits of this paper do not permit me to discuss the treatment of peritonitis in general, nor consider Ochsner's plan of not operating at all in septic peritonitis, nor the postural treatment of Clark and Fowler. But from my own experience, so far as the drain is concerned, I would limit its use after intraperitoneal operations to these cases: 1st, in which there are single or multiple walled-off collections of pus; 2d, in which necrotic tissue must be left behind within the peritoneum; 3d, in which intestine is seriously damaged or the suturing of which is known to be faulty and almost sure to give way.

DISCUSSION.

Dr. T. W. Huntington, San Francisco—I want, in opening this discussion, to express my very high appreciation of this paper. Five years ago had such a paper been presented it would have met with a feeling of hesitancy. I think we have arrived at a point where such a procedure will be acceptable to the large majority and will be adopted by the large proportion. I think that while few have so far adopted this plan, most surgeons are leaning in that direction. If we can rule out those cases in which abdominal drainage is necessary, we shall find that abdominal drainage will succeed. There are two factors encountered in dealing with any surgical case. First, that represented by X, the patient; second, that represented by Y, the personal equation of the operator. The first is the more important. Upon the personal equation of the patient must depend the operator. If we find a patient who is willing, but has not the ordinary amount of resistance, the matter should be discussed more seriously than with the average. On the other hand, an enormous responsibility rests upon the shoulders of the operator when he closes a wound in which there is any abdominal infection.

It has been the experience of most of us to see a bit of bowel denuded in liberating it from some other coil. The moment you uncover it from its peritoneum you then expose an area which may become a focus of infection. If, on the other hand, with a knife blade you go step by step, cautiously dividing the little adhesive bands that join, and if where we have an adhesive band acting as a constricting band it can be lifted carefully up, tied, and then divided, leaving the coat of the intestine intact, we have accomplished very much and are rid of the necessity of abdominal drainage. The reader alluded to the dangers of removal for abdominal drainage. In a case which had gone on very favorably for 5 days and in which there was diffuse septic peritonitis, I was unwise in attempting to remove the Mikulicz sac at the end of the 5th day before it was softened by exudate. I loosened up the pack and the surface of the bowel at once bled a little. It looked unpromising and the patient went on to immediate chill; death followed in 48 or 72 hours. Had I been wise enough to have left the drain without any thought at all of its removal for 48 hours I believe that patient might have recovered. The inability of the surgeon to drain the peritoneal cavity in the presence of diffuse infection I think has been dealt upon sufficiently.

Dr. E. E. Kelly, San Francisco—I think there is one point which ought to have been mentioned and that is the particular part of the peritoneum which is to be drained. Robinson has proved that the infection in the upper portion of the abdominal cavity is much more

serious than infection in the lower portion. Experiments which I think he made on animals proved very conclusively to his own mind that the fatality of infection is very much more rapid in the upper than in the lower portions. Where there is a general septic infection there can be very little danger from drainage. I believe we are at the point of a better understanding of when drainage is necessary and when it is not. That is the most difficult question.

Dr. Emmet Rixford, San Francisco—The idea that the general peritoneum cannot be drained is not a new one. It was advanced by Olshausen long ago. But it has taken a long time for it to be generally accepted. We have recently entered upon a new era in abdominal surgery. We have discovered that the peritoneum is the surgeon's best friend. It will remain our friend as long as we refrain from abusing it. This fact is definitely admitted by most surgeons, and yet men will operate in the midst of an advancing peritonitis, thereby destroying what resistance there is, destroying the peristalsis of the bowel by mechanical irritation. They will go on opening localized abscesses across the sound peritoneum and hunting around with the exploring finger, and thereby spread the infection. They will go on flushing such pus cavities, still further spreading the infectious material over the abdominal cavity with the idea that the peritoneum will be better able to handle it. In my opinion, this is all wrong. Localized abscesses ought never to be opened across the healthy peritoneum unless ample provision is made by packing to prevent the pus from reaching the peritoneum; it is a fault of personal technique if peritonitis follows the opening of localized abscesses. The work of Ochsner of Chicago is now the subject of great discussion all over the surgical world, and there is much to be said in favor of his position. If you operate in the presence of an advancing peritonitis you destroy the resistance which still remains. If you leave the thing alone, nature will do something towards destroying the infectious material. You cannot remove all the bacteria from an infected peritoneum and your efforts to do so will cause paralysis of the bowel and do more harm than good. If the localized abscess be in the pelvis in the female it can be opened through the vagina. In the male the abscess cavity can be opened just as readily through the rectum. It is nature's method of evacuating abscesses into a hollow viscus. Personally, I have operated in five such cases, putting in permanent T drains with no uncomfortable result to the patient. In some cases I have closed the abdomen and then gone in through the rectum with a blunt dilating instrument. The matter of gunshot wounds has not been mentioned. That is another point for debate. A gunshot wound of the abdomen is almost necessarily infectious. It is a case of acute infection. It is not the same thing as infection from old pus poured into the peritoneum. In old pus the bacteria are dead, but in a gunshot wound you have very likely injury to the intestine or stomach or bladder. Pieces of clothing are carried in. There is no time to make cultures nor to determine whether the bacteria present are in virulent culture or not. In these cases it is vastly better to make drainage. The question is where to make it. If the wound is in the upper part there is no question that the drainage should be made through the posterior wall deep down in the flanks.

Dr. A. S. Lobengier, Los Angeles—The reader of this paper has given us principles which unquestionably represent the best surgical treatment in this country. It seems to me that we are to-day very much nearer a rational solution than before. Undoubtedly the region of the right hypochondrium represents a field

in which drainage will have to be considered as important for infectious and gangrenous conditions. The pelvis can be approached and drained more easily than the region of the gall bladder and pancreas. Drainage in the average case is not necessary; I feel that it has been the cause in many cases of the untoward result. I want to urge against the common use of the Mikulicz drain. It has a very limited use. A drain can be improvised from gutta percha tissue, using the rubber tissue as a substitute. In this way you can get the best area of drainage with the least adhesions, and you can remove a drain of that kind in 24 hours without any damage and without any fear of irritation to the intestine and peritoneum.

Dr. J. Rosenstirn, San Francisco—While modern surgery is fully in sympathy with the principles advanced by Dr. Stillman, I believe there are some exceptions which he has not mentioned to-day, where even a Mikulicz drain may be needed. Some cases do not always yield to such measures as Dr. Stillman has mentioned. There are certain changes in the blood, diathetic, in very severe icteric patients, where capillary hemorrhages do not yield to pressure, adrenalin or similar measures. I have had to fight in several cases with such persistent hemorrhages, and the only thing I found was pressure by Mikulicz drain. In the removal of the Mikulicz drain, as laid down by the originator, no force should be applied. Relying upon the adhesions made within the 4 or 5 days, I try to remove it with salt solution irrigation. That is, every day I have saline solution poured on the Mikulicz drain and if there is resistance I pull; with these measures I am able to remove the drain. Another place in the peritoneum where drainage, I think, is necessary is in subphrenic abscesses. If you cut in on such an abscess through the upper part of the diaphragm after shutting off the pleuritic cavity, how will you omit drainage after you have opened the abscess?

Dr. W. S. Porter, Oakland—My personal experience is in support of Dr. Stillman. I have seen many of the class of wounds such as Dr. Stillman describes.

Dr. O. O. Witherbee, Los Angeles—What I wish to say is simply what we all would corroborate; it is beyond any surgeon to tell just when and when not to use a drain. I have closed with and without drainage. I agree with the speaker that in a larger percentage of cases closing without drainage gives very excellent results. I have closed the peritoneal cavity without drainage, feeling that my patient would do as well as the average patient and had develop within 12 or 18 hours a temperature. I have taken a pair of forceps, passed them into the incision and had a gush of fluid spurt from the opening. I have inserted a small strip of gauze and had that patient do exceedingly well after this fluid had escaped which it was evidently trying to do. We cannot tell every time when to use and when not to use drainage. If a great quantity of gauze is put into the abdominal cavity and pulled out with force it is a huge mistake. We should use a very slender strip and wait until the parts are willing to release it.

Dr. C. M. Cooper, San Francisco—I would like to ask Dr. Stillman regarding the posterior drain, in what cases he uses it, and if he uses posterior drainage after operating upon a case of acute infection?

Dr. Stillman—The discussion has taken a wider range than I have taken in my paper. It is impossible to cover all this ground in one paper. There is but one idea in the paper and that is that the peritoneum, in combatting with mechanical or chemical irritation will drain itself and will dispose of microorganisms and fluids which are not too septic and too virulent. In cases in which the temperature rises suddenly and on culture show streptococcus infec-

tion, nothing would save the patient. We do not drain so much as we used to do. If you have a reasonable excuse for leaving out the drain, do it. A subphrenic abscess, that is an abscess in itself, localized, a pancreatic cyst, a cyst of the pelvis, etc., is something to be drained as any abscess is drained. No one uses a Mikulicz drain if he can use anything else. Where a little, slender drain is used, it might be left out. I am only giving you my experience and am asking your opinions. As far as the gall bladder is concerned it is well pointed out that drainage is needed there. The natural drainage of the abdomen is toward the diaphragm. In order to prevent peritonitis drain toward the diaphragm. The dangerous part of the peritoneum is the upper part next to the diaphragm. If you have localized collections of pus inside or outside of the gall bladder, drain as you would in other collections of pus; where you remove the gall bladder without soiling the surrounding part, close it up. As to gunshot wounds I would treat by washing out, sewing up, and leaving alone unless I feared the wall might be infected. How many have recovered on the battlefield without any treatment at all!

The Reed Memorial Fund—The Committees appointed for the purpose by the American Medical Association, the American Association for the Advancement of Science, and the Congress of American Physicians and Surgeons, met August 15 in Bar Harbor, together with friends of the late Major Reed, M. D., U. S. A. Representative men were present from different parts of the country, and letters were received from various members of committees already appointed to promote the collection of a memorial fund in grateful commemoration of Dr. Reed's services in connection with yellow fever. Important suggestions were presented from President Eliot, Dr. W. W. Keen, Prof. J. W. Mallet and others. Dr. Daniel C. Gilman, chairman of a committee appointed by the American Association for the Advancement of Science, presided, and Dr. Stuart Paton acted as secretary. Among those who took part in the conference were Dr. W. H. Welch of Baltimore, Dr. Janeway of New York, Dr. Abbott of Philadelphia, Dr. Herter of New York, Dr. Parker of Chicago, Dr. Putnam of Buffalo, Dr. Fremont Smith of Bar Harbor and Dr. Sajous of Philadelphia, and beside these medical gentlemen, Bishop Lawrence of Massachusetts and Messrs. Morris K. Jesup, president of the New York Chamber of Commerce; John S. Kennedy, president of the Presbyterian Hospital of New York, and William J. Schiffelin of New York. It was decided that an effort should be made to raise a memorial fund of \$25,000 for Dr. Reed's widow.

Hypnotism as Anesthetic for Major Operations—The successful amputation of a limb under hypnotism is reported (*The Lancet*, London, August 22) in a patient suffering from necrosis of the bone and severe ulceration of the leg. In a previous operation the patient bore the anesthetic badly and hence wished to be relieved of the necessity of taking another. Hypnotism was used as a last resort. The operator refused to work unless the means for anesthesia were at hand, but fortunately their use was not required. The patient went through the operation successfully and the temperature at no time was above normal. Recovery was uneventful except for a slight hemorrhage and sloughing of a portion of the flap, which was not accounted for. While we believe that hypnotism as a therapeutic remedy has long passed its heyday, its occasional use will doubtless still be heard from.—*Jour. A. M. A.*

REPORTS OF MEDICAL SOCIETY MEETINGS.

California Academy of Medicine.

Abstract of a preliminary report of a case of Bone Filling, by Thos. W. Huntington, M. D., at the meeting of the California Academy of Medicine, Aug. 25, 1903.

The patient was a male aged 20, who for two months had suffered from a subacute osteomyelitis of carpal end of right radius. Symptoms present were pain, swelling, tenderness and almost complete suspension of function of wrist, hand and fingers.

The bone was opened over the area shown by the X-Ray to be affected. A cavity containing about two drachms of pus was emptied and carefully sterilized. The cavity was then packed with granular calcined bone powder and the wound closed. A small amount of the filling extruded and remained buried beneath the soft tissues. This caused pressure necessitating removal of the skin sutures. The patient was exhibited on the sixteenth day after operation, showing a well-healed wound. Pain and tenderness had disappeared and joint and hand function fully restored.

Reference was made to the literature bearing upon this method of treatment of bony defects; to the work done by Dr. W. I. Terry in a similar direction, also to the published cases of Dr. Julius Rosenstirn in which plaster of paris was employed for the purpose of supplying bone defects.

The regular meeting of the Academy for September was held on the evening of the 22d. Dr. W. W. Kerr presented a patient, German, miner by occupation, 40 years of age, who had Hodgkin's disease. He had had gonorrhea and more recently syphilis. Glands in the various triangles began to enlarge some five years ago. The glandular enlargement was very general. The liver and spleen were enlarged and somewhat tender. Spasmodic pains at night were very severe and were at first relieved with hypodermatics of 1-100th of a grain of nitroglycerin. This caused severe headaches and was discontinued. Potassium iodid was used and occasionally mixed treatment; red corpuscles ranged from about 2,000,000 to nearly 3,000,000; there was no leucosytosis. Methyl blue was substituted for nitroglycerin and relieved the pain without producing the headaches. Dr. Kerr also exhibited a patient who three years ago had come under observation, having marked anemia. About a year ago he again came under observation and a tumor was discovered in the right lumbar region. The man had a dilated stomach, marked secondary anemia (hemoglobin running as low as 20% or less) with 1,605,000 red corpuscles, but no unusual increase in the white cells. The mass in the lumbar region is hard, but little tender; smooth, and is behind the colon, as determined by inflating that viscus. There is generally a trace of albumen in the urine, but nothing more. The possibility of some lesion of the right kidney was suspected. General condition has improved and there are now about 3,500,000 red cells.

The case of Hodgkin's disease was discussed by Drs. Ophüls, Brown and Cheney. Dr. Brown suggesting the possibility of tubercular infection being the cause of the disease.

The case presented by the second patient was discussed by Drs. Tait, Kerr, Huntington, Brown, Cheney, Kugeler, Brunn and Barbat. Dr. Tait suggested that the mass might be a cystic kidney of the adult type, though there were no marked kidney symptoms. Dr. Huntington suggested the advisability of a diagnostic incision under cocaine anesthesia. Dr. Brown saw the man a year ago and at

that time thought the mass to be an osteo-sarcoma arising from the pelvis; he thought the anemia due to the stomach trouble and not at all influenced by the tumor. Dr. Cheney thought the surgeons should be called in to make a diagnosis, and that perhaps the stomach trouble might be relieved by removal of the mass, and possibly reduplication of the stomach wall. Dr. Kugeler suggested a mixed retro-peritoneal tumor. Dr. Brunn thought it might be a tumor of the adrenal. Dr. Barbat called attention to the possibility of having very grave involvement of the kidney without urinary symptoms. Dr. Kerr said that operative interference had been suggested to the patient, who declined it, and that it was not urged for the reason of his general anemia condition, few red cells and small percentage of hemoglobin. Operation could do little good, for if the tumor is malignant it is inoperable and if not it is doing no harm. Diagnosis could be made quite as well, ultimately, at the post mortem, though he thought there could be no objection to a diagnostic incision under cocaine.

Dr. H. Kugeler read a paper on and presented a specimen of Membranous Dysmenorrhea. The paper was largely historical in nature and gave a general resume of the subject as treated by various authors.

Dr. J. Henry Barbat read a paper reporting the occurrence of two cases of Strangulated Appendicitis in Femoral Hernia. The paper was discussed by Drs. Tait and Ophüls. Dr. Ophüls called attention to the presence of bacilli other than the colon bacillus in the fetid pus in such cases. Dr. Tait made a similar comment and suggested that the odor was probably due to the presence of anaerobes. He doubted the advisability of considering the appendix stump a suitable means of closing the canal. Dr. Barbat said that the appendix had been in the canal for nine years and the stump was firmly imbedded at the time of operation; there was nothing else to do but to so use it. Meeting then adjourned.

Fresno County.

The Fresno County Medical Society met in regular monthly session on September 1st, at the offices of Dr. Manson, the president, Dr. E. J. Coney in the chair, a large number of the members being in attendance.

Under the regular order of business, Dr. Hare brought to the attention of the Society the importance of making every effort to increase our membership. He cited the rapid increase in membership in the State organization since the re-organization plan was effected, and laid stress upon the advantage that would accrue to medical legislation when we are solidly united. He thought that possibly our bars of admission had been a little too high, heretofore. Several members spoke upon this latter point, calling attention to the fact that there is a standing invitation to all regular physicians in good standing to join us. We are now the guardians of the A. M. A., and it should be our endeavor to maintain a high moral and professional standing among our members.

Digressing somewhat, it might be well to state that this Society numbers 40 members, active and enthusiastic. There are very few, perhaps not more than 10, regular physicians in the county who do not hold membership with us. The attendance at the monthly meetings is always large, the society meeting with the various members, from month to month. It has long been and still is the custom, for the

physician, at whose offices the society is to meet, to entertain the members socially, after the regular order of business has been finished. Banquets, lunches and refreshments are monthly occurrences, following the reading and discussion of the paper of the evening. These little spreads bring us into harmony; an hour is spent in social converse, and the best of good fellowship prevails. I know of no other society the members of which work in such perfect accord as in our local organization. Fresno is noted for the unity and good feeling among its physicians, and it would be well if other societies would follow this custom of entertaining their brother practitioners occasionally. Our competitors are not so degenerate as we are often led to think. A better acquaintance often dissipates previous erroneous and unkind impressions. Of course, where the society is large, the idea of entertaining each month is impracticable, but where the membership is 50 or under, I know of nothing better to promote and maintain the spirit and feeling that should exist among the devotees of our noble profession.

A communication from the secretary of the State Society, asking this body to nominate one of our members, to be appointed by the President of the State Society, as a member of the National Auxiliary, Congressional and Legislative Committee, was read. Dr. Geo. A. Hare was nominated.

The San Joaquin Valley Medical Society meets in Fresno the second Tuesday in October. This matter was brought to the attention of the society, and a committee of three was appointed to make arrangements for the proper entertainment of the visiting physicians.

The paper of the evening was entitled "Carcinoma of the Breast" and was read by Dr. J. D. Davidson, the author choosing this subject because it is so "fatal to human life and so alarmingly on the increase." The disease has been known since the earliest times, and many theories advanced for its causation and many measures adopted for its cure, but as yet we can offer nothing definite and satisfactory either as to etiology or cure. However, the amount of study being given to this subject by pathologists and clinicians leads one to believe that our efforts will soon be crowned with success.

The author states that 80 per cent of all tumors of the breast are carcinomatous, and three and nine-tenths per cent sarcomatous. "A very small per cent is left for benign tumors, and if we should pronounce every tumor of the breast that comes to us, malignant, our percentage of correct diagnoses would be better than our average now of all cases treated. Should you find a hard lump on either the upper or lower outer quadrant, near the nipple, and it is retracted and dimpled, together with enlarged axillary glands, pronounce it malignant. It makes little difference which plan of treatment is pursued, 60% of these cases will be dead in two years." After mentioning, only to condemn, all other measures now used, the author states that the knife, used early, is our only hope. The X-Ray was classed with other remedies, as a failure.

A general discussion followed.

The society adjourned to meet with Dr. P. N. Russell at the October session.

ANGUS B. COWAN, Secretary.

Humboldt County.

The regular meeting of the Humboldt County Medical Society was held at Ferndale, Tuesday evening, Sept. 8th, with a good attendance. In the absence of Dr. R. Felt, the president, Dr. Delamere of Ferndale presided.

The fee bill committee asked for further time in which to complete a fee bill and were given until next meeting to make a final report.

A communication was read from the Secretary of the State Society, asking this society to name a member to be appointed by the president of the State Society on the National Auxiliary Congressional and Legislation Committee of the American Medical Association. The request was placed before the society, and Dr. G. N. Drysdale of Eureka was named and the Secretary instructed to notify the Secretary of the State Society.

A communication was read from Dr. Stanley of Hydesville, stating that a man by the name of Nelson was practicing in Hydesville without a license, and the Secretary was instructed to investigate, and to notify the District Attorney of the facts.

Clinical cases were reported by Drs. C. C. Falk and Gaynor. The papers of the evening were read by Drs. Loofbourrow of Eureka and Horel of Arcata.

Dr. Loofbourrow headed his paper "Redwood Poisoning" and stated that lacerated or punctured wounds caused by redwood splinters were more apt to be followed by severe cellulitis than wounds from other kinds of wood in this county, and that it was particularly noticeable in the spring and early summer. He cited several cases giving the history and treatment. The treatment is similar to that of cellulitis from any other cause. In advanced cases free incision followed by continuous irrigation or dressings kept moist with some antiseptic. Lately he had been using acetozone with good result.

Dr. Horel's paper was on "Legitimate Medicine" and dealt with the duty of physicians to their patients, and to one another. He deprecated the tendency toward prescribing proprietary preparations, and urged the necessity of studying *materia medica*. His paper will probably be read again at some meeting when there is a full attendance.

G. N. DRYSDALE, Secretary.

Napa County.

The Napa County Medical Society met on the 1st of September with President Elmer E. Stone in the chair.

The meeting was very interesting and profitable and all those present took part in the discussion of a paper read by Dr. Upton of Napa on "Ductless Glands."

At adjournment every member expressed himself as well pleased with the meeting.

The new society has affiliated with the State Society with the following list of members: L. M. Pulsifer, W. E. Upton, M. A. Ap Lynne, W. H. Leach, E. E. Stone, B. Shurtleff, E. Z. Hennessey, Napa; W. W. Rumsey, Yountville; W. H. Porter, H. L. Parish, Calistoga; W. L. Plodgett, Oat Hill; F. Beyersdorf, Pope Valley; C. E. Winslow, Bartlett Springs; J. L. Arbogast, J. H. Hawkins, D. E. Osborne, St. Helena, and Wm. J. G. Dawson, Glen Ellen.

J. L. ARBOGAST, Secretary.

Orange County.

The Orange County Medical Association met in their permanent meeting rooms in the Santa Ana Library building for the first time Tuesday, Sept. 1.

The paper of the evening was read by Dr. Gordon; subject, "Puerperal Eclampsia."

The society is now making arrangements for a medical library, which will be placed in the rooms set apart for their meetings as soon as suitable cases can be secured.

We have the entire library of the late Dr. Crane,

which, with about 100 volumes contributed by the members, will give us a good nucleus to build upon.
H. S. GORDON, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session Sept. 15, at the office of Dr. James. The president, Dr. Ross, presided, and the following members answered the roll call. Drs. Baldwin, Cox, Duffley, Hatch, Henderson, James, Krull, McKee, Lindsay, Nichols, Parkinson, Poore, Roes, G. C. Simmons, G. L. Simmons, S. E. Simmons, Sutliff, Strader, Stevenson, Twitchell, G. A. White, John White and Wright.

By request of the secretary of the State Society, a representative of the society was chosen to act on the National Auxiliary, Congressional and Legislative Committee of the A. M. A.—Dr. G. L. Simmons was the unanimous choice of the Society.

Under the head of "Report of Cases" the following were reported:

Dr. McKee was called to see a young lady who had fallen, striking her abdomen; the injury was followed by nausea and vomiting; after the second day these symptoms were much alleviated and patient seemingly began to get well, but on the third day patient suddenly became worse; seemed to be in a state of collapse. Dr. White was called in to see her, but the patient was in such a weakened condition that it was thought best not to operate. Patient lived 'till sixth day. At post-mortem examination the spleen was found displaced into the pelvic cavity; enlarged and congested, and gangrenous in places; all the viscera with which it came in contact were also gangrenous.—The immediate cause of death was strangulation of the spleen.

Dr. White reported a case of a young man who fell from a wagon seat just behind the horses; the horses became frightened and kicked, striking the man in abdomen. On examination two contused areas were found on abdominal wall; there were signs of collapse, so abdominal wall was opened; the jejunum was found punctured and considerable undigested matter from gut was found in abdominal cavity;—the cavity was cleansed and the perforation sutured. Patient is doing well and has chance for recovery.

The paper of the evening was read by Dr. James, on "The Diagnosis and Treatment of Chronic Interstitial Nephritis." The discussion was opened by Drs. G. A. White and W. K. Lindsay; Dr. Jessie Wheeler of Sacramento and Dr. F. W. Harms of Galt were elected members of the society.

J. W. JAMES, Secretary.

San Bernardino County.

Needles, Cal., Sept. 7, 1903.

To the Editor of the State Journal—Our secretary (of San Bernardino County Medical Society) having recently been appointed County Physician, finds himself too much hampered by his new duties to write news items for publication in our JOURNAL; but we are all anxious to be known to you, and to have you know that we appreciate your efforts in our behalf, while we commend the style and make-up of the JOURNAL. Our society meets every second Wednesday of each month at San Bernardino the county seat. The officers are: James P. Booth of Needles, president, and J. H. Meyer of San Bernardino, secretary. On account of my remote location (250 miles east of San Bernardino), I am deprived of the pleasure and profit of many meetings, but I am none the less interested in the welfare and prosperity of the Society. I hope every member

will subscribe for the JOURNAL, and, as many interesting and valuable papers are read at the meetings, I trust some of the best of them will be forwarded to you for publication. Please send me bill for the JOURNAL and I will remit at once. Wishing success and prosperity, I am yours very truly,

JAMES P. BOOTH, M. D.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held on Tuesday evening, September 8, President Kengla in the chair. In the absence of Dr. Barbat, secretary, Dr. Alderson, assistant secretary, was at the desk.

The evening's program was opened by Dr. Thos. W. Huntington, who presented a patient demonstrating the transposition of the fibula. The patient was a young boy and was presented to show the operation in its first stage. The doctor explaining that at a future date he hoped to show the complete result.

Dr. Wallace I. Terry said that union of upper end of tibia and fibula is somewhat against his previous experience. With regard to use of bone ash, he was unable to find any trace of it upon examination some time after operation.

Dr. S. J. Hunkin referred to a case where fibula was transplanted on astragalus. The patient, a boy, comes back at least once a year with his foot deformed. When brace was removed the foot turned.

Dr. M. Krotoszyner read a paper, "Observations on the Prostate Gland in its Relation to Gonorrhea."

Dr. Grosse thought it very important to call attention to the involvement at the prostate in gonorrhea. He obtained results in vibratory massage.

Dr. Rigdon designated it as "a burning question". He referred to the frequency with which the disease extended beyond the prostate through wandering follicles.

Dr. Rosenstirn said gonococci lodge for a long time in the glands. Secretions show this after gonococci supposed to have died out.

Dr. Winterberg cited cases where disease showed in progeny. Said in old cases the pus cells were not always destroyed.

Dr. Krotoszyner said it was a mistake to suppose gonococci would not die out—they do; as microscopic examination proves.

Dr. H. D'Arcy Power read a paper on "Rodent Ulcer with Report of Case." The doctor exhibited photographs indicating the progress of the growth.

The subject was discussed by Drs. J. Henry Barbat and H. B. A. Kugeler.

Dr. D. A. Stapler read a paper on "What Causes Appendicitis?" laying particular stress on loss of tissue and subsequent infection.

Dr. Huntington said that while the question had been thrashed out, still the last word had not been spoken or written. Students of the subject always find infection to be the keynote in the matter of the etiology. Further knowledge must come from the laboratory. The doctor read from the published conclusions of Dr. Frasier of Philadelphia. In closing he said foreign substances in the appendix may not do serious damage.

Dr. Rosenstirn said the main question is, whence comes the infection? Is it from presence of foreign body or a result of capillary hemorrhage? We all believe that infection is the cause. He would rather know what microscopic demonstrations prove.

Dr. Hunkin dwelt on the point that more men than women have appendicitis.

Dr. Tait referred to the frequency of capillary

hemorrhages, and said he was convinced that what many will call capillary hemorrhage is simply the direct result of operative manipulation.

Dr. Power said we know constipation attends; may there not be connection between the two?

Dr. Barbat advised early operation. One patient having cervical glands infected he operated and removed appendix, good results. Appendicitis may attack strong as well as weak.

San Joaquin Valley Medical Society.

The San Joaquin Valley Medical Society holds its next annual meeting on the second Tuesday of October, the 13th, at Fresno. The programme for the meeting is not yet announced, but probably it will be quite as good as is usually the case. The Valley Society has an enviable reputation for the quality of the papers presented and for the large attendance at its meetings. The JOURNAL wishes them an even more successful meeting than usual.

Santa Clara County.

San Jose, Sept. 16th, 1903.

The stated meeting of the Santa Clara County Medical Society was held this evening. After the transaction of general routine business, Dr. R. A. Whiffin furnished the society with a paper on "Puerperal Septicemia," which was discussed by Drs. Beattie, Saph, Cothran, Paterson, Witter, McNary and Frasse.

Dr. D. F. Beattie said that the prevention of puerperal septicemia is of more importance than its treatment. The prophylactic treatment of a pregnant woman is of prime importance. The vigorous use of the brush and soap to cleanse the hands and the nail cleaner to clean the finger nails is the best means of preparing the hands to care for an obstetric case. Antiseptic solutions, such as bichloride of mercury, carbolic acid, etc., should always be used, but the common way of passing the hands quickly through these solutions is of little use. To get the proper effect, the hands should be immersed in the solution from ten to twenty minutes, according to the antiseptic used. But the thorough preparation of the patient is as necessary as the cleansing of the hands. The parts should be washed with soap and water and sponged with bichloride sol. 1-2000. In many cases it is best to give a creoline douche, or a hot saline douche. In all cases of enema to clear the rectum is essential. Frequent examinations are to be discouraged. After the first examination, in usual cases, nothing is gained. Examinations after the birth should be avoided, if possible, but if necessary it should be done with the same care and preparation as a surgical operation. The bruised or often lacerated vulva, vagina or uterus are in a condition to take up poison. We should be most careful to prepare for any more attention to the patient. If infection has taken place, and curetting has been done, the use of intra-uterine douches of bichloride are not recommended. Creoline, carbolic acid or even sterile water are to be preferred. I prefer to clear the uterus once thoroughly with a dull ring curette, dry it with gauze, and pack lightly with gauze. The gauze brings away any shred or clot that may be left behind. If irrigation is used, care should be taken to hang the douche-bag very little higher than the patient's body. I have only had one case of puerperal septicemia in my practice. It was caused by conditions existing before pregnancy. I used injections of serum antistreptococci and antidiatheretic, almost in desperation, but could notice no good or bad effect from their use. I have used formalin, but not enough to know much about it. Subcutaneous injections of normal salt solutions are useful. Much depends on the constitutional and local treatment, and the support given the patient by proper food. I forgot to mention the use of Crede's ointment, spread thickly over the abdomen and covered with oiled silk.

Dr. W. K. Davis remarked that the treatment of puerperal infection is fraught with much uncertainty and many disappointments. The intra-uterine douche is accompanied with dangers which should be guarded against. Curetment to displace adherent particles of placenta. I have found at times beneficial, but too much care cannot be taken to prevent injury to the tender and denuded surfaces. The employment of sterile cotton on a carrier, to which the particles will adhere, I have found most satisfactory. But the most important measures are certainly prophylactic. Every avenue through which infection might enter should be carefully

guarded; not only the hands of the physician, but those of the nurse or attendant should be clean and all napkins or compresses sterile. Quinia should be given freely at the beginning of labor and continued for at least ten days in decreasing doses. I believe this remedy to be a great prophylactic. I give my patients six grains when labor begins and repeat this dose in four hours if labor has not terminated. I give three grains three times a day for the first three days, then two grains three times a day for two or three days; after this two grains night and morning for a week. In a practice of twenty years I have not lost a patient from puerperal infection.

Dr. Asay referring to the use of quinia, endorsed the remarks of Dr. Davis as to the value of the drug in such instances, both as a precaution against and a germicide in cases of septic infection. Evidently the therapeutic value of quinia was either ignored through prejudice or not clearly understood by many practitioners.

Dr. H. J. B. Wright said that he believed with Dr. Davis that the administration of quinia to a parturient woman is a good prophylactic measure. It will often jugulate a commencing inflammation as well as assist in the prevention of sepsis. The use of bichloride solution as an agent to cleanse the uterus is of questionable propriety; it is a very dangerous drug. I have seen terrible results follow its use on the parturient uterus. Let me urge the physicians having cases of confinement under their care to make very few vaginal examinations.

Dr. J. N. Frasse—I know of nothing that makes a physician feel better than to get through with a long and tedious confinement case. A physician, entering the room with some pleasant remark, is shocked at the flushed face, the throbbing temples, rapid breathing and rapidly rising temperature of her who was doing so nicely. "Puerperal infection," says the physician to himself. I think it safer to consider the case one of uterine infection, and to carry out the treatment accordingly, until it has proven to be a trouble less dangerous. I have the patient drawn down to the edge of the bed, her knees separated and her feet placed on chairs. With an antiseptic solution the external genitalia are thoroughly washed off; the bag being only a short distance above the patient, a vaginal douche is then given; next a vaginal speculum is introduced, the antiseptic solution allowed to flow into the vagina and out again through the open speculum; by this method no infection from the vagina or external genitalia is carried into the uterus. A sterilized lister thread catheter is now carried through the patulous os and the antiseptic solution permitted to flow while the catheter is moved forward and back the length of the uterine canal to dislodge any clots or other debris. The uterus is then either packed with 10% iodoform gauze, being careful not to cause any traumatism through rough handling, or else a suppository of iodoform is introduced. I have never seen a case of iodoform poisoning follow such treatment and I do not consider a garlicky breath a symptom to be taken into consideration, in so grave a condition. I prefer a weak carbolic-boric acid solution for douching. Should frequent douching be necessary, I would change from one antiseptic to another to avoid absorption from too frequent use of one variety of antiseptic. If the infection is uterine only, there should be a considerable drop of temperature, the temperature remaining pretty well down. If the temperature goes down, but soon rises again, the infection is probably intra-uterine but the infected material has not been removed. I then with all the former precaution, again douche the uterus; and introducing a pair of forceps carefully search for any other substance. The uterus is douched once more and more iodoform gauze, or an iodoform suppository introduced. If the temperature now does not stay down, the infection is probably extra-uterine, and one should look for infection about the uterus; and if an abscess is found it should be promptly opened. I wish to emphasize that the douche bag should be hung only a little higher than the patient; for I have known severe shock and a violent pelvic peritonitis to follow the neglecting of this measure.

Summary:

1. (a) Simple, improved by washing; (b) recurring, improved by washing, temperature again rising due to
2. Peritoneal not improved or only slightly by washing, peritoneal infection, often going on to abscess formation.

Dr. M. A. Southworth, a member of this society, who a few weeks ago undertook to stop a train of cars by butting into the locomotive on his return from a visit to the County Hospital of which he had charge, and who suffered from broken ribs and other severe injuries by the collision, is now so fully recovered as to be out on the street and visiting his old patients.

J. LAMBERT ASAY, Secy.

Society Eye, Ear, Nose and Throat Surgeons.

The spring meeting of the San Francisco Society of Eye, Ear, Nose and Throat Surgeons was held with President Dr. Louis C. Deane in the chair.

Dr. Payne read a paper on "The Advantages of Mule's Operation over Simple Enucleation."

The President—The only objection I have to offer is that the Doctor has used the term "simple technique" to cover a large number of interesting facts. I should be pleased to have him go more fully into the subject.

Dr. Payne—The operation should be done with the least possible traumatism. To accomplish this one desirable step in the operation is to keep the eyeball in position by using long steel pins to transfix the sclera just behind the limbus, one pin above and one below. I find the cataract blade best for beginning the amputation of the cornea and a small scissors to complete it. The sclera is emptied with as little violence as possible. By introducing a probe upon the end of which a cotton ball is rolled loosely one engages all the interocular structures by twisting it around, and this torsion empties the sclera completely, unless there has been extensive interocular inflammation, in which case some exudate may be adherent to the sclera and no curettage is required. Hot bichloride solution, 1 to 6000, is sufficient to arrest hemorrhage and sterilize the field.

The glass ball is cleansed with alcohol and left standing in 1 to 3000 bichloride before use. Sometimes the cornea is small and its amputation leaves an opening not large enough to introduce a ball. Here a nick with the scissors on the side admits the ball readily. Careful approximation of the cut edges of the sclera and conjunctiva with silk follows. The sclera heals slowly and requires silk. The sutures remain 10 days and usually most of them cut out by that time. It is a mistake to imbed catgut sutures to bring the scleral wound together. There should be no tension across the glass ball, and still the sclera should be sufficiently filled to keep its form.

Reaction following these operations is great if much violence is used. The lids are carefully replaced over the stump and the orbital opening carefully filled with a cushion of absorbent cotton held in place by a snug bandage. In the first twenty-four hours there will probably be some pain, usually relieved with one hypo. The bandage is not removed until the fourth or fifth day if things go well. The patient can leave the hospital at the end of a week and at the end of two weeks the case is in a very good condition, though not yet ready for the shell.

Dr. Pischel—I have performed Mule's operation only a few times, with good success. But I must confess I am always somewhat afraid of sympathetic inflammation. Regarding the appearance, the hollow artificial eyes, if well made, fulfill all reasonable demands.

Dr. Eaton mentioned the use of paraffin injected into the capsule of Tenon as a substitute for evisceration of the globe.

Dr. Wiborn—I have seen 18 or 20 cases. There were three failures, one excessive reaction from carbolic acid caused the ball to come out, another the globe was a little too large and broke the stitches, and in the third the stitches did not hold, the wound gaped, and for about eight months caused the globe to look like a dilated pupil. The other cases were satisfactory, giving free movement and nice appear-

ance. Reaction is violent when carbolic is used, and ice is necessary for 48 hours or so.

Dr. Nagel—My experience has been with a modification of Mule's operation. I use a silver wire ball instead of the glass ball and I've never had one come out. One of the points in the operation is not to get too large a ball. I have a very favorable opinion of the operation.

Dr. Deane—Much has been said against the Mule's operation, but to me it should rank as one of the classic operations when performed in selected cases. At this evening's meeting thirty-five cases have been reported by several of our members and out of that number only four cases were considered failures.

Dr. Payne—In the cases I selected for the operation there was practically no danger of a sympathetic ophthalmitis. All reported were successful and not one has had any trouble with the stump. So far as I can gather, Mule's operation has not been followed any more often by sympathetic trouble than has enucleation.

Dr. Eaton remarked that the reports on the Mule's operation from various parts of the globe have been antagonistic and the general mass of evidence against it, etc.

Dr. Payne—Dr. Eaton has quoted what the vast experiences of oculists have been. I admit that the reports of isolated cases have been unsatisfactory, many oculists abandoning and condemning the operation after an experience of two or three cases. Dr. Wiborn reports twenty cases with three failures. Two of these were improperly selected for the operation. The point I wish to make is that with care in selecting cases and with greater care in technique our results will be as good as in simple enucleation and a better cosmetic effect obtained.

Yolo County.

The Yolo County Society for Medical Improvement has been organized with Dr. Walter Ernest Bates, Davisville, as president; Dr. T. C. Dixon, Grafton, vice-president; Dr. W. J. Blevins, Woodland, treasurer, and Dr. F. R. Fairchilds, Woodland, secretary. The society starts with eight members on the rolls and five others who have signified their intention to join. At the first meeting it was decided to apply for affiliation in the State Society.

Oregon State Medical Society.

The Oregon State Medical Society held its annual meeting at Portland on the 29th and 30th of September. The JOURNAL has arranged to have the meeting reported and we shall publish a full and special report in our next issue.

STATE, COUNTY AND MUNICIPAL SANITARY CONFERENCE OF CALIFORNIA.

Organization of the Health Officers of California was effected under the above title on the 8th of September, at the meeting called by the State Board of Health for that purpose. Dr. Martin Regensburger was elected president of the newly formed Conference, and Dr. N. K. Foster, secretary of the State Board of Health, was chosen secretary. Dr. Foster made the very wise suggestion that if the meetings were called for the same time and place as the meetings of the State Society, the attendance would undoubtedly be much larger. It was certainly unfortunate that so few (perhaps thirty) of the 150 health officers of the State took the trouble to attend the meeting. W. I. Foley of Los Angeles read a paper "On the Necessity of More Direct Regulation of the Public Health by

the State Under its General Police Power." Antiquated and poor laws, and lack of political interest in things pertaining to public health, were strongly pointed out. The public and the politicians should be educated up to the importance of these matters. This can best be done by a solid organization of the medical profession, making properly directed efforts. Prof. Rising read a paper on "Food Adulteration," which was most timely. A very interesting discussion of the smallpox question and its relations to local and municipal conditions was quite a feature of the meeting. Much can be done if money is available, but there is great difficulty in getting proper appropriations from country authorities and the work that should be done is thus materially hindered. Dr. D. H. Currie read an excellent paper on the subject of "Rats and the Danger of Their Spreading Disease," which will be published in the next issue of the JOURNAL.

MEDICAL PUBLICATIONS.

The Boy's Venereal Peril—This is the title of a pamphlet received from Dr. F. C. Valentine of New York, and is an elaboration of a paper read before the last meeting of the A. M. A. In it Dr. Valentine strives to place a statement of the facts relating to puberty, sexual instinct, sexual desire, prostitution, etc., together with those relative to venereal disease and its consequences, before the youth of the land. It is his desire to so prepare a bald and unattractive statement of things which are too often left to the boy to discover for himself, that it may be placed in the hands of the boy or young man and may help to lead him away from vice and to remain clean. That every developing boy should receive just this sort of information at the right time cannot for a moment be disputed. Nor can the wisdom of the effort to get such statements in simple language into the hands of those who should read them be questioned. The only criticism I should make is that Dr. Valentine has largely failed in his purpose by overshooting the mark. He forgets that there are many sorts of boys; many kinds of young men; many good, clean and excellent people who would not agree with him in the statement that a man, to be a man, should neither smoke nor drink alcoholic beverages. He shows a lack of appreciation of relative values in this, and in his remarks anent prostitutes and prostitution; a more intimate knowledge of facts and a more sympathetic appreciation of the real actualities of life would moderate some of these remarks of his and be productive of a better, because a more nearly accurate, presentation of the case. It is to be hoped that further efforts will be made and a still better pamphlet produced.—P. M. J.

Cytolysins in Serum—A report from Drs. Flexner and Noguchi on their investigations of serums, conducted under grant from the Carnegie Institution, at the Pathological Laboratory of the University of Pennsylvania, is published in the July-August number of the *Univ. Penna. Med. Bulletin*. The title is "On the Plurality of Cytolysins in Normal Blood Serum," and the report deals with investigations of the blood of the dog, ox, rattlesnake and mudpuppy. The same publication also contains a kindred paper by these investigators "On the Plurality of Cytolysins in Snake Venom," in which experiments the venoms of cobra, water-moccasin, rattlesnake, daboia and habu were used. The last named snake is Japanese, sent in by Kitasato, and the daboia, like the cobra, in an Indian

species. "The analysis of venom given . . . indicates an interesting complexity of structure, in virtue of which the solvent action of venom upon different animal cells is shown to be due not to the presence of a single substance, but to a number of principles which are distinct from one another."

The *Journal of Cutaneous Diseases* is the name adopted last month by the Grafton Press, publishers, 70 Fifth Ave., New York, of their journal, which heretofore included in the title, genito-urinary diseases. Dr. A. D. Newborn of New York is the acting editor, with whom are associated eight prominent physicians in different parts of the country.

The publication of a daily medical journal under the editorship of Dr. Albert Warren Ferris, editor of the *Medical Critic*, is projected by the Medical Publishing Company of America, 154 East Seventy-second Street, New York City. It is certainly a large undertaking and at the present time it is difficult to foresee the ready fulfillment of the promises outlined in the prospectus at hand. We wish the promoters every success in their undertaking and we earnestly hope that they may keep themselves and their paper entirely free from the influence of desirable nostrum advertisers, and all other such-like quacks. Those who may desire further information will probably get it by addressing the company as above. The publishers offer to send the *Daily Medical Journal* and the *Medical Critic* to subscribers for one dollar, paid in advance.

Pamphlets and Reprints.

"Hyoscine in the Treatment of Morphinism," by T. D. Crothers, M. D., Hartford, Conn. (Reprinted from *Therapeutic Gazette*.)

"A Pharmacological Study of an Aseptic Preparation of Ergot for Hypodermic and Internal Administration," by E. M. Houghton, Ph. C., M. D., Detroit, Mich. (Reprinted from the *Therapeutic Gazette*.)

Medical Examining Board of New Jersey—The New Jersey examining board now requires academic as well as medical training, for admission to examination. A certificate of four years in a normal or high school of the first grade, or its equivalent in work, is demanded. Some such requisite should be demanded here in California, for the "English" (Heaven save the word!) that appears in some of the examination papers is certainly "fierce"! It is utterly absurd to allow anyone to undertake high grade professional work unless he has had the proper academic as well as professional training.

Liability When Riding on Pass—In the U. S. Circuit Court for the District of Maine, the court, in *Duncan vs. Maine Central Railroad Company*, held that a person riding on a pass given without consideration, and after assenting to the condition that he should assume all risk of accident, and that the carrier should not be liable, cannot recover from the railway for injuries received caused by the negligence of its servants. It was also decided in this case that it was immaterial that the giving of the pass was a breach of the Act to Regulate Commerce.—Abs., from *Railway Journal*.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

Facial Erysipelas.

W. F. Rodue, in the *Surg. Clinic*, recommends the following combination in the treatment of facial erysipelas:

R. Ichthyol.....	3ii	8
Etheris.....	3i	4
Collodii.....	3v	20

M. Sig.: Apply locally with a camel's-hair brush two or three times daily.

According to the author this solution checks the spread of the disease and quickly relieves the pain. In those individuals who are asthenic he prescribes tincture of ferric chlorid internally and in suppurative cases calcium sulphid.

Darlin advocated the use of collodion, claiming that this dressing diminished the temperature of the part, and by compression interfered with septic absorption.

The following combinations are of value, according to *Merck's Archives*, in the local treatment of erysipelas:

R. Resorcin.....	3i	4
Ichthyol.....	3ii	8
Ung. hydrarg.....	3i	30
Lanolini.....	3i	30

M. Sig.: Anoint the parts freely, cover with oil silk and apply light dressing; or:

R. Acidi picrici.....	gr. x	65
Etheris q. s. to dissolve.		
Aq. destil.....	3iii	90

M. Sig.: Paint over the affected area two or three times daily.

Local Anesthesia.

The following simple method of producing local anesthesia is noted in an abstract appearing in *Med. Age*, in which a solution composed of adrenalin chlorid and cocaine is used in the following proportions:

R. Sol. adrenalin chloridi.....	3ii	8
Cocaine hydrochlor.....	gr. v	30
Aqua.....	3ss	15

M. Sig.: Fold lint into four layers and saturate it with the foregoing solution and place it on the positive electrode of a galvanic battery. A large negative electrode should be applied elsewhere, and a current of 15 to 30 milliamperes gradually turned on and continued for 15 or 20 minutes. The surface should then be washed with ether, when superficial operations may be performed.

Physicians' Commissions on Refilled Prescriptions

—The Journal has received through a correspondent a copy of a circular letter sent out by a drug manufacturing firm, which we do not care to advertise here by a name, proposing to allow physicians 10 per cent commission on the refills of prescriptions of the firm's preparations. They argue that the physician is entitled to something on the refilling of his prescriptions, but, under the usual practice, he alone of the trio—manufacturer, retailer and prescriber—does not profit. It is easy to see how the manufacturer hopes to increase his profits if the physician will only co-operate. The professional aspect of the transaction is another thing. No matter how excellent the products of this firm may be, and we know nothing about them, no ethical physician would accept a com-

mission for prescriptions and much less we should say for their unauthorized repetition, as is implied in the circular letter referred to. It is only a bid for more business, with a rather cleverly devised trap for physicians included. If the ethical argument is not sufficient, those who are incapable of fully appreciating its force may also consider the fact that advertising proprietary remedies and encouraging the public into the practice of self-dosing with them, as is suggested by the circular, is a bad practice financially for the physician and physically for the patient.—*Jour. A. M. A.*

"The Toxicity of Methyl Alcohol in Extracts and Medicines" is the title of a paper by Dr. R. H. Main, in *Am. Medicine*. He finds it commonly substituted in extracts and reports a number of deaths undoubtedly due to this cause. Deaths have been reported after the administration of from 2 to 5 drams of methyl spirit, so the danger is seen to be by no means hypothetical or remote. "Reports of its substitution are so numerous that it is useless to enter into a bibliography of the subject."

Picric Acid in Uterine Gonorrhea.—Serra reports 21 cases of gonorrheal urethritis, with metritis, Bartholinitis or vulvovaginitis, including 5 cases in which the gonococci were not found, but otherwise presented the same picture. All were treated with injections of a 12 per 1000 solution of picric acid, and he found the results very satisfactory. It destroys the gonococci and they vanish early if treatment is commenced promptly. The injections are made about twice a week, with a Braun syringe holding 5 c.c.; the fluid is injected into the uterus and the vagina tamponed with gauze removed the next day. His patients were cured with one exception in from ten to forty-five days, and there has been no recurrence since. These intrauterine injections are not irritating, but have a decided analgetic action, and for their other advantages, inexpensiveness, reliability, stability of the preparation, etc., deserve more general adoption. He describes his cases in detail.—*Jour. A. M. A., from Riforma Medica.*

New names for old lamps—Under the captions "new remedies" or "new preparations", the following have been noted in sundry of the trade journals:

"Flucol." Australian oil of eucalyptus. This is, of course, of very much greater therapeutic value as flucol than it could be simply as oil of eucalyptus. And besides, the pharmacist needs new preparations and things to fill up his empty shelves!

"Uriform." Another hexamethylene-tetramine, to be added to the list published last month. These preparations are not coming out quite so fast as they should. Surely every manufacturer has some ammonia and a little formalin on hand; why not dump them together and put out another "new remedy"? If more activity in the matter of supplying new things is not shown pretty soon, a good many doctors in this country will have to go out of business for lack of things to prescribe.

In this connection it might be well to quote the stereotyped expression with which all the reading notices concerning these "new remedies" published in the trade journals wind up. The name of the

particular preparation may be filled in the blank space to suit the inclination of each individual reader.

"We believe the manufacturers of.....in placing this preparation on the market have simplified the treatment of.....and as.....is being extensively advertised to the medical profession, there will undoubtedly be a large demand for it. The progressive druggist probably already has it in stock, or is about to place his order."

Another "new" (?) remedy.—In a letter to the *Pennsylvania Medical Journal*, Louis Emanuel states that certain things excited his curiosity in regard to an alleged "new remedy" called "oxychlorine". This he carefully examined and analyzed and found that it corresponded exactly in physical and chemical characteristics with *sodium chlorate*; from this he deduces the opinion that "somebody is imposing upon the medical profession by giving a new name to an old remedy." Judging from other experience along the same line, it is at least possible that such is the case.

Salicylic acid ester of quinine has three (or more) trade names, for the confusion of all interested. It is on the market under the trade names of *rheumatin*, *salochinin* and *salochinine*. Each one of these is very much better than the others and should under all circumstances be specified and insisted upon.

".....a female remedy of value"—This is indeed interesting. It has been suspected, from the vast quantity of young appearing annually, that there was a sex differentiation in remedies. Here is a hint of the truth of the suspicion; possibly we shall receive more enlightenment later. Biology will await, impatiently, further knowledge; and particularly such as will throw light upon the great variations in type.

Hay fever has been studied with great care and from a rather new side, recently, and the developments are interesting. The existence of a toxin in certain pollens has been demonstrated, and it has been found that this toxin will, even in minute quantities, produce the symptoms of hay fever when instilled in the eyes. Successive inoculations of the pollen-toxin into horses produce a serum that absolutely neutralizes the toxin and dispels the symptoms resulting from its instillation. Thus far most of the work has been purely experimental and laboratory, but a small amount of clinical experience has been reported and it seems to be all favorable. Probably it will not be long before we have a number of brands of "hay antitoxin" on the market, and of course each one will be the only one to use and the others will all be worthless.

"Drug Habit," by Dr. W. E. Nichols, in the *Wisconsin Medical Recorder*, contains much interesting data. The sales of "patent" medicines amount to over \$65,000,000 annually and is steadily increasing. Most of these nostrums contain alcohol in from 17 to 44 per cent. In 1902 three times as much cocaine was imported as in 1896, and it is hardly possible to assume that this enormously increased consumption was due entirely to an increase in the legitimate use of the drug. Dr. Nichols suggests as a cure for the opium, cocaine and alcohol habits the careful use of hyoscyne hydrobromate.

Another local anesthetic,—"Stated to be free from pernicious effects", has recently been placed upon the market. It possesses the euphonic name, in chemistry, of *para-amidobenzolc-acid-ethyl-ester-para-*

phenolsulphonate; as this is too large a baby to be comfortably dandled on the knee, it has been given a name, "for short",—"subcutis". It is a derivative of anesthesin, which is also a polysyllabic local anesthetic of German extraction. The immigrant children keep on coming.

"Anybody but a physician can practice medicine; anybody but a dentist can practice dentistry; anybody but a qualified druggist can sell drugs without paying any attention to the law.... The manufacturer of and dealer in secret and proprietary medicines... may know nothing about drugs or disease, about medicines or their effects. He may make up compounds of whose ingredients he does not know the name or the nature and he may recommend and prescribe these preparations for any and every ill that flesh is heir to—AND HE DOES IT."—Dr. A. R. McCarthy in *Penn. Med. Journal*.

New York Association Meeting—The New York State Medical Association meets in New York City October 19th to 22d, and it is anticipated that there will be a large and interesting meeting. Certainly the most important thing that can come before the Association is the matter of joining with the State Society. Now that the code of ethics can no longer be used as a club to keep the two medical bodies from union it does not seem clear how the few men to whose personal interest it is to oppose can longer keep them apart. That the Society was in the right and the Association in the wrong was pretty clearly demonstrated by the American Medical Association at its last meeting at New Orleans.

Dr. W. H. Wiley, in the *International Journal of Surgery*, reports the rather unusual occurrence of a gunshot wound of both mother and child, thirty-three hours before delivery. But little shock and no antepartum hemorrhage resulted. The child was wounded at the junction of the dorsal and lumbar vertebrae, two ribs fractured and the cord evidently injured, as there was paralysis of the lower extremities. The mother recovered uneventfully, though the course and location of the 22 calibre bullet was not determined. At the time of reporting the case, some 5 weeks after the injury, the child was doing remarkably well and the paralysis seemed to be rapidly disappearing.

"The coroner of Philadelphia reports that fifty per cent of the deaths among children coming under his notice were due to aural sepsis."—Dr. J. H. McCassey, in *Pediatrics*.

"Since the beginning of the 19th century, 25 chiefs of State and cabinet ministers of this and the countries of Europe have perished by assassination, the fruition of 142 plots."—Dr. E. C. Spitzka, in *N. Y. Med. Journal*.

The president of the Washington State Board of Medical Examiners, in a letter to *Northwest Medicine*, cites some answers to questions in the examination in Physiology; they were all from graduates of eastern schools, and some of them are "choice": "Section of the pneumogastric would produce paralysis of the brain."

"Fibrin is a mass of fibrous elements floating freely in the blood."

"Vim passes out through the naval."

The orthography is highly entertaining: "Esófagus," "gass," "oxygen," "parallics," etc.